



Quick Selection 2012/2013

Danfoss Compressors

>5000

code numbers in one catalogue

Simply the easiest way to find the code numbers you need for your specific application - all in one place

>100

Products in one catalogue

The most frequently used refrigeration products from the extended Danfoss ranges have been collected in one catalogue. A timesaving way to find exactly what you are looking for. A part of your toolbox.



www.danfoss.co.uk/ra



www.climatecenter.co.uk



Compressors

Danfoss Compressors



Constant innovation, constant progress

Throughout the last 50 years Danfoss Compressors has built a strong position as a global leader in the refrigeration and air conditioning industry. By constantly listening to the needs of our customers and the daily users of our products, we continue to develop innovative solutions that are energy-efficient and environmentally responsible.

With the most complete range of products for virtually any refrigeration or air-conditioning application, we are proud to offer solutions that are famous and trusted by customers all over the world for their reliability, efficiency and high quality.

Extensive product and application range

Our product range covers all common HC, HFC and HCFC refrigerants. Customers can choose from small, direct current hermetic compressors for mobile applications to large scroll compressors for commercial air conditioning or industrial applications.

Pushing technology further

We were the first to market with R134a. We can also cater for needs with energy optimised, including models with variable speed and monitoring as well as models developed for the solar energy industry. Proof of our constant focus on providing value through maximum efficiency, environmental safety and low noise levels.

Compressors	222 (16)
Direct current compressors.....	224 (10)
Reciprocating compressors – Household & Light commercial.....	226 (10)
Reciprocating compressors – Commercial.....	236 (16)
Scroll compressors – H series.....	240 (20)
Scroll compressors – SH series.....	248 (28)
Scroll compressors – Heat pumps.....	252 (32)
Reciprocating compressors - Variable speed.....	254 (34)

Scroll Compressors

Danfoss scroll compressors cover a full range of capacities, perfect for any application from light commercial to large commercial systems. Available in a large variety of single and tandem models for refrigerants R407C, R134a, R410A and R22, the compressors combine high energy efficiency with low sound and minimal vibration.

Special features	Benefits	Applications
<ul style="list-style-type: none"> Simple, compact and lightweight construction Optimised scroll, motor and shell design 100% suction gas cooled and shielded motor Large refrigerant capacity Large oil reserve 	<ul style="list-style-type: none"> Easy to install and service Energy efficiency with long lifetime expectancy and low noise Works in high temperature environments Reliable operation in all conditions 	<ul style="list-style-type: none"> Water chillers Self contained air conditioning units Split systems Central air handling units Heat pumps Residential air conditioning

Reciprocating Compressors (commercial)

Designed for refrigeration as well as air conditioning applications with refrigerants R22, R407C, R134a, R404A and R507A, the Danfoss Maneurop range of compressors covers all requirements in the 1.5-26 HP range. The compressors are available with rotoblock connections, suitable for parallel mounting as well as factory made units.

Special features	Benefits	Applications
<ul style="list-style-type: none"> Large internal volume, large oil sump, sturdy design 100% suction gas-cooled motor Internal motor protection High efficiency circular valve design 	<ul style="list-style-type: none"> operation under extreme conditions versatile no need for air circulation around the compressor long lifetime expectancy and reliability 	<ul style="list-style-type: none"> Walk-in freezers & cold rooms Frozen food processing and storage Blast freezers Low temperature racks Ice cream machines Display cabinets Water chillers Large packaged air conditioners

Reciprocating Compressors (household & light commercial)

Specially optimised for use in household and light commercial applications, hermetic reciprocating compressors from Danfoss provide high cooling capacity in an energy saving design. The compressor series can be used with refrigerants R134a, R290, R404A/R507A, R407C and R600a perfect for cooling needs from 20 W to 6 kW.

Special features	Benefits	Applications
<ul style="list-style-type: none"> Compact construction Durable housing Optimised motor technology Wide voltage range Low GWP refrigerant Variable speed 	<ul style="list-style-type: none"> Easy installation at lower cost Low noise and high energy efficiency Robust in tough operating conditions Immune to unstable power supply Environmentally friendly solutions 	<ul style="list-style-type: none"> Laboratory and medical equipment Compressed air dryers Glass door merchandisers Display cabinets Fridges and freezers Ice cream cabinets Vending machines Drink dispensers Ice making machines Bottle coolers Heat pumps Milk cooling tanks Wine cellars

Variable Speed Solutions for Light Commercial Refrigeration

Cut a slice out of your energy bill with variable speed control

Optimise cabinet display cooling with SLV compressors

SLV Variable Speed Drive Compressor with intelligent 220 V 50/60 Hz controller is the natural choice when you need a versatile package for a wide range of light commercial LBP applications like freezers and cabinets. You will thus secure both high food quality and a low energy bill in a single solution.

System performance monitoring with built-in data logging function, use of one, intelligent controller for control and alarm management integrated in a compact, reliable and easy to install unit – and many other important enhancements that place SLV compressors far ahead of optimised compressors.

The integrated design of the compressors helps reduce system costs, enabling of more than 30% energy reduction in supermarket and convenience store cabinets, compared to non-optimised compressors.

SLV compressors are available for R404A/R507 and the environmentally friendly refrigerant, R290.

Product advantages	Customer benefits
<ul style="list-style-type: none"> · Integrated variable speed and adaptive temperature control · High Temperature Stability · Wide voltage range · Uses R290 (other refrigerants possible) · Built-in data logging and failure detection · Remote monitoring option · Lower average compressor speed · Compressor, speed control, cabinet control functions, display and monitoring – all in one integrated solution 	<ul style="list-style-type: none"> · Reduces energy consumption of more than 30% · Reduced food loss and increased food quality · High efficiency and reliability · Allows shop owners to comply with future legal refrigerant requirements now · Environmentally friendly · Enables shop owners to comply with the HACCP standard on food quality · Easy integration in existing and new monitoring systems, e.g. Retail Care® · Lower acoustic noise · Simpler installation, less room for errors, easier field service

Reciprocating Compressors (Direct current)

Tailored for cooling on the move

The excellent performance of the BD series safeguards food, medical and telecommunication. Use:

- BD35F/50F/80F compressors for 12/24V DC, R134a in mobile refrigerators and freezers
- BD220CL compressors for 12V DC, R404A LBP/MBP for bigger van cooling boxes
- BD250GH / BD350GH compressors for 12/24V DC, R134a HBP for mobile spot cooling systems
- BD250GH / BD350GH compressors for 48 V DC, R 134a HBP for telecommunication.

All the compressors are equipped with an electronic control unit with built in speed control, thermostat signal, thermal protection, safety against destructive battery discharge, electronic thermostat and fan speed control on selected.

Product advantages	Customer benefits
<ul style="list-style-type: none"> · Efficient and reliable · Lasting performance · Low weight · Silent operation · Ideal for solar energy supply · Compact design · Energy optimisation · Speed/capacity control · Energy optimisation, high COP 	<ul style="list-style-type: none"> · Operation under extreme conditions · Minimal energy consumption · Portable beyond traditional limits · Low sound emission · Application possible at extreme voltage rate · Fits virtually anywhere · Safeguard for your food

Reciprocating compressors – BD Direct current



BD35F Multivoltage

R134a, -30°C, +10°C evap. temp.

All mobile applications for portable boxes, boats, trucks etc., can be powered with AC and DC, 85-265 V AC 50/60 Hz, 12-24 V DC, automatic selection of AC when available, 26-150 W cooling capacity.

BD35F with EMI Electronic

R134a, -30°C, +10°C evap. temp.

Designed for boats and trucks if risk of electric interference with radio or other electrical equipment, 26-150 W cooling capacity.

BD35F/50F/80F Basic

R134a, -30°C, +10°C evap. temp.

All mobile applications for portable boxes, boats, trucks etc., 26-150/36-190/55-270 W cooling capacity.

Applications	Compressors		
	BD35F	BD50F	BD80F
Truck refrigerators	✓		
Boat refrigerators	✓	✓	✓
Bus refrigerators	✓		
Portable boxes	✓	✓	✓
Car minibars (high end)	✓		
Car minibars (SUV, MPV)	✓		
Spot cooling (e.g. trucks)			
Self-contained van boxes		✓	✓
Battery cooling - telecommunication			
Solar chest cabinets	✓	✓	
Heatpumps			

Compressors R134a	Code numbers	Electronic units (voltages & code numbers)								
		Standard 12-24 V DC 101N0210	EMI 12-24 V DC 101N0220	High Start 12-24 V DC 101N0230	High Speed 12-24 V DC 101N0290	AEO EMI 12-24 V DC 101N0320	Solar 10-45 V DC 101N0400	AC/DC conv. 12-24 V DC & 100-240 V AC 101N0500	Automotive 12-24 V DC 101N0600 101N0630	Extended EMI 12-24 V DC 101N0900
BD35F (mm con.)	101Z0200	✓	✓			✓	✓	✓	✓	✓
BD35F (inch con.)	101Z0204	✓	✓			✓	✓	✓	✓	✓
BD50F (mm con.)	101Z1220	✓	✓	✓		✓		✓		✓
BD50F (inch con.)	101Z0203	✓	✓	✓		✓		✓		✓
BD80F	101Z0280				✓					

Compressors R134a	Capacity [W] at max. speed EN12900 Household/CECOMAF ASHRAE														
	Evaporating temperature [°C]														
	-40	-35	-30	-25	-23.3	-20	-15	-10	-5	0	5	7.2	10	15	
BD35F			26.2 32.2 35.9 44.2 40.4 49.7 50.5 62.2 69.8 86.0 93.6 115 122 150												
BD50F			36.7 45.2 52.2 64.4 58.3 71.9 71.4 88.2 94.9 117 123 152 157 194												
BD80F			54.8 67.6 78.0 96.1 86.7 107 105 130 138 170 176 218 221 274												

Compressors R134a	Code numbers	Power consumption [W] at max. speed														
		Evaporating temperature [°C]														
		-40	-35	-30	-25	-23.3	-20	-15	-10	-5	0	5	7.2	10	15	
BD35F	101Z0200			36.0	42.8	45.4	50.8	59.5	68.9	78.5						
BD50F	101Z1220			47.0	59.0	63.0	70.7	82.6	95.0	108						
BD80F	101Z0280			69.0	87.0	93.0	105	123	144	168						

Test condition

EN 12900-CECOMAF / ASHRAE LBP

Condensing temperature: 55 °C / 54.4 °C
Ambient temperature: 32 °C / 32 °C

Suction gas temperature: 32 °C / 32 °C
Liquid temperature: 32 °C

Reciprocating compressors – Household & Light commercial

Hermetic compressors R134a

Application	Compressor	Code numbers			Capacity [W] conditions as listed														Power consumption [W]					
		Compressor on pallet	Compressor single pack with HST equipment	Compressor with oil cooling	Evaporating temperature [°C]														Evaporating temperature [°C]					
					-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	-35	-25	-10	5		
HBP / MBP / LBP	PL35G	101G0250	195B0245						28	39	53	69	89	112	140	172	209			48	67	90		
	TL2.5G	102G4251	195B0268																	48	60	84	113	
	TL3G	102G4350	195B0006				11	22	36	51	69	90	116	145	179	219	264				66	96	133	
	TL4G	102G4452	195B0008					41	58	80	107	140	180	226	280	342	413				83	118	154	
	TL5G	102G4550	195B0011					56	79	107	139	178	224	278	341	414	497				100	149	205	
	FR6G	103G6660	195B0191					48	83	124	171	226	290	365	452	552					109	172	241	
	FR7.5G	103G6680	195B0024	103G6690				62	99	142	193	254	325	408	505	618					126	194	272	
	FR8.5G	103G6780	195B0026	103G6790				85	123	171	228	298	381	478	592	722					151	231	321	
	FR10G	103G6880	195B0027	103G6890				92	136	188	250	324	412	516	638	779					179	265	362	
	FR11G	103G6980	195B0028					115	170	233	307	395	501	628	780						202	317	445	
	SC10G	104G8000	195B0043					23	60	113	183	268	369	486	618	764	925	1100			93	181	290	383
	SC12G	104G8240	195B0050	104G8250				65	113	175	252	348	464	603	768	960	1182	1437			148	227	355	493
	SC15G	104G8520	195B0053	104G8530					164	290	424	568	728	908	1110	1340	1600				233	440	595	
	SC18G	104G8820	195B0059	104G8830					283	394	526	684	870	1087	1337	1624	1950				331	507	695	
	SC21G	104G8140	195B0048						333	453	606	792	1012	1268	1560	1889	2256				382	575	789	
	SC12/12G	104G8280	195B0051					129	226	350	505	696	928	1206	1535	1920	2364	2875			296	454	710	986
	SC15/15G	104G8580	195B0056						328	581	847	1137	1457	1815	2220	2679	3201				465	879	1190	
	SC18/18G	104G8880	195B0060						566	788	1052	1368	1740	2174	2674	3248	3900				662	1014	1390	
SC21/21G	104G8180	195B0049						667	907	1212	1584	2025	2536	3120	3778	4511				771	1156	1581		
LBP	PL50F	101G0222	195B0001						40	56	74	95	120	148							58	84		
	TL53FT	102G4324	195B0484					21	34	50	69	92	120							45	62	92		
	TL54FT	102G4424	195B0463					27	43	63	88	117	152							68	87	123		
	TL55FT	102G4524	195B0321					48	71	98	131	170	216							84.5	114	165		
	TLES5.7FT.3	102G4615						66	90	120	156	200	253							90	120	170		
	TLES6.5FT.3	102G4703	on request					72	100	134	176	228	290							107	142	200		
	NL6FT	105G6628	195B0296					60	84	115	152	198	253							93	123	184		
	NL6.1FT	105G6620	195B0440					60	84	115	152	198	253							93	123	184		
	NL7.3FT	105G6726	195B0441	105G6731				71	100	136	181	235	299							108	145	220		
	NL8.4FT	105G6865	195B0442	105G6866				87	120	162	213	275	350							127	169	252		
	NL10FT	105G6829	195B0327	105G6839				113	158	213	281	361	455							159	217	327		
	SC12FT	104G8205	195B0282 (O)	104G8215				103	163	233	314	408	517	645						184	265	380		
	SC15FT	104G8505	195B0407					126	197	280	376	489	620	772						223	311	451		
	SC18FTX	104G8805	195B0408					144	229	325	437	567	719	896						257	365	517		
	SC21FTX	104G8105	195B0514					192	296	415	553	713	901	1119						296	428	613		
	TL4FX	102G4400	195B0007					31	44	61	81	107	137							60	81	122		
	TL5FX	102G4501	195B0241					43	60	82	110	144	183							70	101	154		
	TL55FX	102G4520	195B0010					48	71	98	131	170	216							82	112	162		
	TL56FX	102G4620	195B0235					58	77	104	139	183	235							84	119	181		
	TL57FX	102G4720	195B0255					66	89	120	160	208	264							97	136	207		
	NL7FX	105G6706	195B0176					71	99	136	182	238	303							71	136	303		
	NL9FX	105G6802	195B0178					74	111	155	207	268	340							109	167	260		
NL11FX	105G6900	195B0182					102	146	200	268	351	453							137	212	331			
SC15FX	104G8500	195B0052					100	155	230	325	439	573	726						186	275	432			
SC18FX	104G8800	195B0057					129	194	280	388	518	669	842						206	313	492			
SC21FX	104G8100	195B0047					186	246	335	454	602	780	987						275	380	600			
MBP	NL6.1MF	105G6660	195B0411							141	189	245	312	390	482	588	709					187	243	
	NL7.3MF	105G6772	195B0370							179	236	304	385	480	591	719	867					227	298	
	NL8.4MF	105G6879	195B0371							213	277	353	445	553	679	825	994					261	349	
	NL10MF	105G6885	195B0276	105G6887						266	346	441	554	687	843	1023	1231					323	435	
	NL11MF	105G6151	195B0432							292	380	485	609	756	927	1125	1354					360	495	
	NLE10MF	105G6888	195B0566							262	343	440	554	688	845					134	198	308	426	
	SC18MFX	104G8804	on request							430	563	722	912	1137	1400							507	657	
	SC21MFX	104G8120	195B0478							530	682	866	1085	1343	1645	1996						594	784	
	GS26MFX	107B0700	195B0433							754	989	1266	1591	1970	2411							696	942	
	GS34MFX	107B0701	195B0435							998	1296	1648	2063	2550	3115							909	1234	
HBP	TL4GH	102G4455	195B0122							104	140	182	230	287	353	429						121	159	
	FR7GH	103G6683	195B0167	103G6692						199	255	327	417	525	655	807						192	258	
	SC10GH	104G8041	195B0142							233	352	478	613	762	927	1113	1323					281	395	
	SC10GHH		on request	104G8071						259	352	467	604	762	942	1144						260	345	
	SC12GH	104G8261	195B0249							429	577	752	957	1196	1471	1787						356	487	
	SC15GH	104G8561	195B0144							559	723	915	1139	1398	1698	2041						424	565	
	SC15GHH		195B0055	104G8571						435	570	726	911	1135	1405	1731						377	505	
	SC18GH	104G8860	195B0246							539	676	855	1077	1340	1645	1990						498	697	
	SC18GH	104G8861	195B0266							485	639	825	1047	1310	1618	1976	2389					452	605	
GS26GHX	107B0702																							

Displacement	Recommended compressor cooling at ambient temperatures									Voltage and frequencies	Electrical equipment						Compressor	Dimensions								
											LST (RSIR)		HST (CSIR)		HST (CSR)			LST/HST		Height [mm]	Connectors location/I.D. [mm]					
	32°C			38°C			43°C				PTC Starting device	Starting relay	Starting capacitor	Starting unit	Cord relief	Cover		A	B		Suction	Process	Discharge	Oil cooler		
	LBP	MBP	HBP	LBP	MBP	HBP	LBP	MBP	HBP		spades	spades	spades	6.3 mm						4.8 mm					6.3 mm	6.3 mm
2.00		F ₂	F ₂		F ₂	F ₂				1/5	103N0011	103N0018	117U6021	117U5014		103N1010	103N0491	PL35G	137	135	6.2	6.2	5.0			
2.61	S	S	S	S	S	S	S	S	F ₂	1/2/3/4	103N0011	103N0018	117U6007	117U5014		103N1010	103N2011	TL2.5G	163	159	6.2	6.2	5.0			
3.13	S	-	F ₂	S	S	F ₂	S	S	F ₂	1/2/3	103N0011	103N0018	117U6009	117U5014		103N1010	103N2010	TL3G	163	159	6.2	6.2	5.0			
3.86	S	-	F ₂	S	S	F ₂	S	S	F ₂	1/2/3	103N0011	103N0018	117U6004	117U5014		103N1010	103N2010	TL4G	173	169	6.2	6.2	5.0			
5.08	S	S	F ₂	S	S	F ₂	S	S	F ₂	1/2/3	103N0011	103N0018	117U6000	117U5014		103N1010	103N2010	TL5G	173	169	6.2	6.2	5.0			
6.23	S	S	F ₂	S	S	F ₂	S	S	F ₂	1/2/3	103N0011	103N0018	117U6000	117U5015		103N1010	103N2010	FR5G	196	191	8.2	6.2	6.2			
6.93	S	F ₂	F ₂	S	F ₂	F ₂	O/F ₁	F ₂	F ₂	1/2/3	103N0011	103N0018	117U6001	117U5015		103N1010	103N2010	FR7.5G	196	191	8.2	6.2	6.2	6.2		
7.95	S	F ₂	F ₂	O/F ₁	F ₂	F ₂	O/F ₁	F ₂	F ₂	1/2/3	103N0011	103N0018	117U6004	117U5015		103N1010	103N2010	FR8.5G	196	191	8.2	6.2	6.2	6.2		
9.05	S	F ₂	F ₂	O/F ₁	F ₂	F ₂	O/F ₁	F ₂	F ₂	1/2/3	103N0011	103N0018	117U6010	117U5015		103N1010	103N2010	FR10G	196	191	8.2	6.2	6.2	6.2		
11.15	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	1/2	103N0011	103N0018	117U6010	117U5015		103N1010	103N2010	FR11G	196	191	8.2	6.2	6.2			
10.29	F ₁	F ₁	F ₂	F ₁	F ₁	F ₂	F ₁	F ₁	F ₂	1/2/3	103N0002		117U6002	117U5017		103N1004	103N2009	SC10G	199	193	8.2	6.2	6.2			
12.87	O/F ₁	F ₂	F ₂	O/F ₁	F ₂	F ₂	O/F ₁	F ₂	F ₂	1/2/3	103N0002		117U6003	117U5017		103N1004	103N2009	SC12G	209	203	8.2	6.2	6.2	6.2		
15.28	O/F ₁	F ₂	F ₂	O/F ₁	F ₂	F ₂	O/F ₁	F ₂	F ₂	1/2/3			117U6005	117U5017		103N1004	103N2009	SC15G	209	203	10.2	6.2	6.2	6.2		
17.69	O/F ₁	F ₂	F ₂	O/F ₁	F ₂	F ₂	O/F ₁	F ₂	F ₂	2/3			117U6019	117U5017		103N1004	103N2009	SC18G	219	213	10.2	6.2	6.2			
20.95	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	1/2/3					117-7028	103N1004	103N2009	SC21G	219	213	10.2	6.2	6.2			
2x12.87	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	1			117U6003	117U5017		103N1004	103N2009	SC12/12G	249	244	12	6.2	6.2			
2x15.28	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	1			117U6005	117U5017		103N1004	103N2009	SC15/15G	249	244	12	6.2	6.2			
2x17.69	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	1			117U6019	117U5017		103N1004	103N2009	SC18/18G	259	254	16	6.2	6.2			
2x20.95	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	F ₂	1					117-7028	103N1004	103N2009	SC21/21G	259	254	16	6.2	6.2			
2.50		F ₂			F ₂					1			117U6021	117U5014		103N1010	103N0491	PL50F	137	135	6.2	6.2	5.0			
3.13	S			S			S			2	103N0011	103N0018	117U6007	117U5014		103N1010	103N2010	TLS3FT	173	169	6.2	6.2	5.0			
3.86	S			S			S			2	103N0011	103N0018	117U6004	117U5014		103N1010	103N2010	TL4FT	173	169	6.2	6.2	5.0			
5.08	S			S			S			2	103N0011	103N0018	117U6000	117U5014		103N1010	103N2010	TL5FT	173	169	6.2	6.2	5.0			
5.70	S			S			S			2	103N0011	103N0018	117U6004	117U5014		103N1010	103N2010	TLES5.7FT.3	173	169	6.2	6.2	5.0			
6.49	S			S			S			2	103N0011	103N0018	117U6016	117U5014		103N1010	103N2011	TLES6.5FT.3	173	169	6.2	6.2	5.0			
6.13	S			S			S			2/3	103N0011	103N0018	117U6000	117U5015		103N1010	103N2010	NL6FT	197	191	6.2	6.2	5.0			
6.13	S			S			S			2	103N0011	103N0018	117U6000	117U5015		103N1010	103N2010	NL6.1FT	188	182	6.2	6.2	5.0			
7.27	S			S			O/F ₁			2	103N0011	103N0018	117U6001	117U5015		103N1010	103N2010	NL7.3FT	188	182	6.2	6.2	5.0	5.0		
8.35	S			O/F ₁			O/F ₁			2	103N0011	103N0018	117U6001	117U5015		103N1010	103N2010	NL8.4FT	190	184	6.2	6.2	5.0	5.0		
10.10	S			O/F ₁			O/F ₁			2	103N0011	103N0018	117U6002	117U5015		103N1010	103N2010	NL10FT	203	197	8.2	6.2	6.2	6.2		
12.87	O/F ₁			O/F ₁			F ₂			2/3	103N0002		117U6003	117U5017		103N1004	103N2009	SC12FT	209	203	8.2	6.2	6.2	6.2		
15.28	F ₁			F ₁			F ₂			2/3	103N0002		117U6005	117U5017		103N1004	103N2009	SC15FT	209	203	10.2	6.2	6.2			
17.69	F ₂			F ₂			F ₂			2/3			117U6019	117U5017		103N1004	103N2009	SC18FTX	219	213	10.2	6.2	6.2			
20.95	F ₂			F ₂			F ₂			2			117U6019	117U5017		103N1004	103N2009	SC21FTX	219	213	10.2	6.2	6.2			
3.86	S			S						1	103N0011	103N0018	117U6009	117U5014		103N1010	103N2010	TL4FX								
5.08	S			S						1	103N0011	103N0018	117U6004	117U5014		103N1010	103N2010	TL5FX								
5.08	S			S						1	103N0011	103N0018	117U6004	117U5014		103N1010	103N2010	TL55FX								
5.70	S			S						1	103N0011	103N0018	117U6004	117U5014		103N1010	103N2010	TL56FX								
6.49	S			S*						1	103N0011	103N0018	117U6000	117U5014	103N0016	103N1010	103N2010	TL57FX								
7.27	S			S						1	103N0011	103N0018	117U6000	117U5015		103N1010	103N2010	NL7FX								
8.35	S			S						1	103N0011	103N0018	117U6001	117U5015		103N1010	103N2010	NL9FX								
11.15	O/F ₁									1	103N0011	103N0018	117U6002	117U5015		103N1010	103N2010	NL11FX								
15.28	O/F ₁			O/F ₁						1	103N0002		117U6003	117U5017		103N1004	103N2009	SC15FX								
17.69	O/F ₁			O/F ₁						1			117U6005	117U5017		103N1004	103N2009	SC18FX								
20.95	O/F ₁			O/F ₁						1			117U6019	117U5017		103N1004	103N2009	SC21FX								
6.13		F ₁	F ₁		F ₁	F ₁		F ₁	F ₁	7/5	103N0011	103N0018	117U6015	117U5015		103N1010	103N2011	NL6.1MF	190	184	8.2	6.2	6.2			
7.27		F ₁	F ₁		F ₁	F ₁		F ₁	F ₁	7/5	103N0011	103N0018	117U6016	117U5015		103N1010	103N2011	NL7.3MF	197	191	8.2	6.2	6.2			
8.35		F ₁	F ₁		F ₁	F ₁		F ₁	F ₁	7/5	103N0011	103N0018	117U6016	117U5015		103N1010	103N2011	NL8.4MF	197	191	8.2	6.2	6.2			
10.10		F ₁	F ₁		F ₁	F ₁		F ₁	F ₁	7/5	103N0011	103N0018	117U6022	117U5018		103N1010	103N2011	NL10MF	203	197	8.2	6.2	6.2			
11.15		F ₂	F ₂		F ₂	F ₂		F ₂	F ₂	7	103N0011	103N0018	117U6022	117U5018		103N1010	103N2011	NL11MF	203	197	8.2	6.2	6.2			
10.10	F ₁			F ₁			F ₁			1	103N0011	103N0018	117U6003	117U5015		103N1010	103N2011	NL10MF	203	197	8.2	6.2	6.2			
17.69	F ₂			F ₂			F ₂			7/8			117U6019	117U5017		103N1004	103N2008	SC18MFX	219	213	10.2	6.2	6.2			
20.95	F ₂			F ₂			F ₂			7			117U6019	117U5017		103N1004	103N2009	SC21MFX	219	213	10.2	6.2	6.2			
26.30	F ₂			F ₂			F ₂			1					117-7055	107B9100/9101/9104*	GS26MFX	259	247	12.9	6.5	8.2				
33.80	F ₂			F ₂			F ₂			1					117-7056	107B9100/9101/9104*	GS34MFX	259	247	12.9	6.5	8				

Reciprocating compressors R404A/R507

Application	Compressor	Code numbers		Cooling capacity [W] conditions as listed													Power consumption [W]		Displacement	Recommended at ambient (* = Run capacitor)							
		Com-pressor	Com-pressor-single pack with HST equipment	Evaporating temperature [°C]													Evaporating temperature [°C]			32°C							
				-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	-35		-25	-10	5	[cm ³]	LBP	MBP	HBP	LBP
LBP	TL4CL	102U2071	195B0021	52	65	84	110	142	182	230	286	352							105	140	198		3.86	F ₂	F ₂		F ₂
	TL4.5CLX	102U2117	195B0573		80	106	139	181	232	294	366								138	181	252		4.63	F ₂	F ₂		F ₂
	FR6CL	103U2670	195B0031	77	108	145	189	243	307	383	473	578							180	242	353		6.23	F ₂	F ₂		F ₂
	FR7.5CL	103U2790	195B0398	86	114	154	202	262	333	418	515	630							197	267	395		6.93	F ₂	F ₂		F ₂
	FR8.5CL	103U2890	195B0038	99	126	168	222	290	372	468	577								231	315	472		7.95	F ₂	F ₂		F ₂
	NL7CLX	105F3710	195B0350	102	146	199	263	340	430	536	657	796							214	274	381		7.27	F ₁	F ₁		F ₁
	NL8.4CLX	105F3800	195B0481	111	158	216	287	370	468	583	715	866							238	305	428		8.35	F ₂	F ₂		F ₂
	SC10CL	104L2523	195B0074			168	258	365	489	634	800	991							243	350	530		10.29	F ₂	F ₂		F ₂
	SC10CLX	104L2533	195B0151			166	255	360	483	625	789	977	1190	1430					258	352	508	631	10.29	F ₂	F ₂		F ₂
	SC12CL	104L2623	195B0076	58	140	237	353	490	650	835	1048	1292							316	445	654		12.87	F ₂	F ₂		F ₂
	SC12CLX.2	104L2697	195B0379	130	205	294	399	522	666	834	1026								365	475	659		12.87	F ₂	F ₂		F ₂
	SC15CLX.2	104L2896	195B0399	159	250	358	486	637	813	1017	1251	1519							433	565	783		15.28	F ₂	F ₂		F ₂
	SC18CLX.2	104L2197	195B0332	194	306	439	595	780	995	1245	1532								517	680	949		17.68	F ₂	F ₂		F ₂
	SCE18CLX.2	104L2196	195B0525	194	306	439	595	780	995	1245	1532								459	621	888		17.68	F ₂	F ₂		F ₂
	SC21CLX	104L2322	195B0070	226	325	455	617	813	1042	1306	1606								534	702	989		20.95	F ₂	F ₂		F ₂
	GS26CLX	107B0500	195B0427	325	497	703	949	1240	1580	1974	2427								669	888	1285		26.30	F ₂	F ₂		F ₂
	GS34CLX	107B0501	195B0439		729	1003	1330	1715	2165	2687	3289								924	1196	1721		33.80	F ₂	F ₂		F ₂
	SC12/12CL	104L4088	195B0119	115	279	475	706	980	1299	1670	2096	2583							633	891	1308		2x12.87	F ₂	F ₂		F ₂
	SC15/15CL	104L4089	195B0109		302	599	905	1230	1584	1976	2417	2916							801	1120	1580		2x15.28	F ₂	F ₂		F ₂
	SC18/18CL	104L4090	195B0110	333	541	789	1083	1430	1836	2307	2849	3469							910	1230	1788		2x17.68	F ₂	F ₂		F ₂
SC21/21CL	104L4094	195B0114	452	650	910	1235	1626	2084	2613	3213								1068	1404	1978		2x20.95	F ₂	F ₂		F ₂	
SLV12CLX.2	104L2603	on request		200	370	542	720	909	1116	1339								404	588	731		12.87	F ₂	F ₂		F ₂	
MBP	NL6.1MLX	105F3611	on request						334	425	530	650	789	946						312	375	6.13		F ₂	F ₂		F ₂
	NF7MLX	105F3720	195B0443						511	635	777	940	1125	1336						406	488	7.27		F ₂	F ₂		F ₂
	SC10MLX	104L2506	195B0345						546	687	855	1051	1278	1537						518	633	10.29		F ₂	F ₂		F ₂
	SC12MLX	104L2606	195B0323						669	838	1038	1272	1542	1852						620	762	12.87		F ₂	F ₂		F ₂
	SC15MLX	104L2869	195B0391						829	1038	1285	1574	1909	2293						780	979	15.28		F ₂	F ₂		F ₂
	SC18MLX	104L2139	195B0392						968	1210	1497	1832	2220	2665						860	1080	17.68		F ₂	F ₂		F ₂
	SC18MLX.3	104L2146	195B0412						1018	1266	1557	1898	2292	2743						878	1096	17.68		F ₂	F ₂		F ₂
	GS21MLX	107B0502	195B0436						1096	1394	1748	2164	2650	3211						965	1212	21.20		F ₂	F ₂		F ₂
	GS26MLX	107B0503	195B0437						1426	1810	2254	2764	3351	4022						1213	1532	26.30		F ₂	F ₂		F ₂
GS34MLX	107B0504	195B0438						1929	2408	2953	3575	4283	5088						1725	2235	33.80		F ₂	F ₂		F ₂	
HBP	TL4DL	102U2038	195B0166						196	229	281	349	432	527	631					203	256	3.86		F ₂	F ₂		F ₂
	FR6DL	103U2680	195B0032						317	385	471	576	698	840	999	1177				354	456	6.23		F ₂	F ₂		F ₂
	SC10DL	104L2525	195B0075						471	611	775	968	1192	1450	1747	2085				479	590	10.29		F ₂	F ₂		F ₂
	SC12DL	104L2625	195B0077						609	806	1028	1279	1565	1890	2258	2674				624	750	12.87		F ₂	F ₂		F ₂
	SC15DL	104L2856	195B0089						759	964	1207	1493	1825	2210	2652	3156				722	865	15.28		F ₂	F ₂		F ₂
	SC15DLX.2	104L2871	on request						774	983	1225	1504	1824	2189	2604	3071				739	870	15.28		F ₂	F ₂		F ₂
	SC10/10DL	104L4091	195B0111						943	1222	1550	1935	2383	2900	3494	4169				957	1180	2x10.29		F ₂	F ₂		F ₂
	SC12/12DL	104L4092	195B0112						1217	1612	2055	2559	3130	3780	4516	5348				1248	1500	2x12.87		F ₂	F ₂		F ₂
SC15/15DL	104L4093	195B0113						1518	1928	2414	2985	3651	4420	5304	6311				1445	1730	2x15.28		F ₂	F ₂		F ₂	

SLV = SC Variable speed Compressor. Performances are displayed at 4.000 rpm

Test conditions (except GS)

EN 12900/CECOMAF
 Condensing temperature: 45 °C
 Ambient temperature: 32 °C
 Suction gas temperature: 32 °C
 Liquid temperature: 45 °C

Test condition for GS 21MLX, GS 26MLX and GS 34MLX

EN 12900-CECOMAF
 Condensing temperature: 45 °C
 Ambient temp.: 32 °C
 Suction gas temp.: 20 °C
 Liquid temperature: 45 °C

Test condition for GS 26CLX and GS 34CLX

EN 12900-CECOMAF
 Condensing temperature: 40 °C
 Ambient temp.: 32 °C
 Suction gas temp.: 20 °C
 Liquid temperature: 40 °C

compressor cooling temperature compulsory)					Voltage and frequencies	Electrical Equipment					Dimensions				
						HST (CSIR)		HST (CSR)	LST/HST		Height [mm]		Connectors location/I.D. [mm]		
38°C		43°C				Starting relay	Starting capacitor	Starting device	Cord relief	Cover	A	B	C	D	E
MBP	HBP	LBP	MBP	HBP	spades		spades								
					6.3 mm	6.3 mm	6.3 mm								
F ₂					1	117U6000	117U5014		103N1010	103N2010	173	169	6.2	6.2	5.0
		F ₂			1	117U6001	117U5014		103N1004	117U1022	173	169	6.2	6.2	5.0
F ₂					1	117U6015	117U5015		103N1010	103N2010	196	191	8.2	6.2	6.2
F ₂					1	117U6016	117U5015		103N1010	103N2010	196	191	8.2	6.2	6.2
					1	117U6010	117U5015		103N1010	103N2010	196	191	8.2	6.2	6.2
F ₁		F ₂	F ₂		1	117U6002	117U5015		103N1010	103N2010	203	197	8.2	6.2	6.2
F ₂		F ₂	F ₂		1	117U6003	117U5015		103N1010	103N2010	203	197	8.2	6.2	6.2
F ₂					1	117U6003	117U5017		103N1004	103N2009	209	203	8.2	6.2	6.2
F ₂					1/3	117U6005	117U5017		103N1004	103N2008	209	203	8.2	6.2	6.2
F ₂					1	117U6005	117U5017		103N1004	103N2009	209	203	8.2	6.2	6.2
					1/4	117U6019	117U5017		103N1004	103N2008	219	213	8.2	6.2	6.2
		F ₂			1	117U6019	117U5017		103N1004	103N2009	219	213	10.2	6.2	6.2
		F ₂			1	117U6013	117U5012		103N1004	103N2009	219	213	10.2	6.2	6.2
		F ₂			1			117-7012	103N1004	103N2009	219	213	10.2	6.2	6.2
					1			117-7012	103N1004	103N2009	219	213	10.2	6.2	6.2
		F ₂			1			117-7056	107B9100/9101/9104*		259	247	12.9	6.5	8.2
					1			117-7074	107B9100/9101/9104*		279	267	12.9	6.5	8.2
F ₂					1	117U6005	117U5017		103N1004	103N2009	249	244	12	6.2	6.2
F ₂					1	117U6019	117U5017		103N1004	103N2009	259	254	12	6.2	6.2
F ₂					1			117-7012	103N1004	103N2009	259	254	16	6.2	6.2
					1			117-7012	103N1004	103N2009	259	254	16	6.2	6.2
		F ₂			1	105N46xx series controllers			103N1004	103N2009	199	193	10.2	6.2	6.2
F ₂			F ₂		7/8	117U6022	117U5015		103N1010	103N2011	203	197	8.2	6.5	6.5
F ₂			F ₂		7/8	117U4139	117U5018		2x117U0349	117U1021	203	197	9.7	6.5	6.5
F ₂			F ₂		7/8	117U6011	117U5017		103N1004	103N2008	209	203	8.2	6.5	6.5
F ₂			F ₂		7/8	117U6011	117U5017		103N1004	103N2008	219	213	8.2	6.5	6.5
F ₂					1	117U6013	117U5012		103N1004	103N2009	219	213	10.2	6.2	6.2
F ₂					1			117-7012	103N1004	103N2009	219	213	10.2	6.2	6.2
F ₂					1			117-7012	103N1004	103N2009	219	213	10.2	6.2	6.2
F ₂			F ₂		1			117-7070	107B9100/9101/9104*		259	247	12.9	6.5	8.2
F ₂			F ₂		1			117-7072	107B9100/9101/9104*		279	267	16.1	6.5	9.7
F ₂			F ₂		1			117-7056	107B9100/9101/9104*		279	267	16.1	6.5	9.7
F ₂	F ₂				1	117U6001	117U5014		103N1010	103N2010	173	169	6.2	6.2	5.0
F ₂	F ₂				1	117U6010	117U5015		103N1010	103N2010	196	191	8.2	6.2	6.2
F ₂	F ₂				1	117U6005	117U5017		103N1004	103N2009	209	203	8.2	6.2	6.2
F ₂	F ₂				1	117U6019	117U5017		103N1004	103N2009	219	213	10.2	6.2	6.2
F ₂	F ₂				1			117-7028	103N1004	103N2009	219	213	10.2	6.2	6.2
F ₂	F ₂				1	117U6019	117U5017		103N1004	103N2009	219	213	10.2	6.2	8.2
F ₂	F ₂				1	117U6005	117U5017		103N1004	103N2009	249	244	12	6.2	6.2
F ₂	F ₂				1	117U6019	117U5017		103N1004	103N2009	249	244	12	6.2	6.2
F ₂	F ₂				1			117-7028	103N1004	103N2009	259	254	16	6.2	6.2

Reciprocating compressors R290

Application	Compressor	Code numbers		EN 12900 (CECOMAF) Capacity [W]												Power consumption (W)				Displacement	Recommended at ambient (* = Run capacitor)							
		Compressor	Compressor single pack with HST equipment	Evaporating temperature [°C]												Evap temp. (°C)					32°C		38°C					
				-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	-35	-25		-10	5	[cm³]	LBP	MBP	HBP	LBP	
LBP / MBP	TL3CN	102H4380	195B0581			38	54	75	99	128	161	200	244	294	351					90	108	135	162	3.13	F ₁	F ₁		F ₁
	TL4CN	102H4490	195B0589			56.5	77.8	103	132	166	205	250	302	360	426					101	127	162	188	3.86	F ₁	F ₁		F ₁
	TL5CN	102H4590	195B0420			81	109	143	183	230	283	345	416	496	586					130	162	211	266	5.08	F ₁	F ₁		F ₁
	NL7CN	105H6756	195B0451			118	166	223	290	368	458	561	679	814	965					174	221	291	372	7.27	F ₁	F ₁		F ₁
	NL9CN	105H6856	195B0265			138	194	259	335	423	526	643	778	930	1102					196	250	334	428	8.35	F ₁	F ₁		F ₁
	SC10CNX	104H8065	195B0474			126	179	245	325	420	531	660	809	979	1172					208	274	362		10.29	F ₂	F ₂		F ₂
	SC12CNX	104H8265	195B0333			178	250	331	426	540	678	846	1050	1293	1582					269	344	456		12.87	F ₂	F ₂		F ₂
	SC15CNX	104H8565	195B0203			195	297	415	550	707	887	1093	1328	1594	1894					315	420	560		15.28	F ₂	F ₂		F ₂
	SC18CNX	104H8865	195B0414			219	341	480	640	824	1033	1272	1543	1849	2193					370	500	707		17.69	F ₂	F ₂		F ₂
	SC12CNX.2	104H8266	195B0458			186	258	346	453	578	725	895								298	379	502		12.87	F ₂			F ₂
LBP	SC15CNX.2	104H8566	195B0505			252	332	434	560	714	900	1120								351	445	610		15.28	F ₂			F ₂
	SC18CNX.2	104H8866	195B0489			244	384	531	689	863	1057	1273								417	541	682		17.69	F ₂			F ₂
	SC21CNX.2	104H8166	195B0459			339	492	654	828	1020	1233	1471								491	623	855		20.95	F ₂			F ₂
	SLV15CNK.2	104L8541	195B0505			325	460	615	792	996	1228	1494								436	583	771		15.28	F ₂			F ₂

SLV = SC Variable speed Compressor. Performances are displayed at 4.000 rpm

Test condition
EN 12900/CECOMAF LBP
 Condensing temperature: 45 °C
 Ambient temperature: 32 °C
 Suction gas temperature: 32 °C
 Liquid temperature no subcooling

Reciprocating compressors R600a

Application	Compressor	Code numbers		EN 12900 (CECOMAF) Capacity [W]												Power consumption (W)				Displacement	Recommended at ambient (* = Run capacitor)						
		Compressor	Compressor single pack with LST equipment	Evaporating temperature [°C]												Evap temp. (°C)					32°C		38°C				
				-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	-35	-25		-10	5	[cm³]	LBP	MBP	HBP	LBP
MBP	PLE35K	101H0360	195B0542						27.2	38.4	51.7	67.7	86.6	109					40.1	53.1			3.00	S*	S		S*
	TLES4KK.2	102H4435	on request			18	28	40	55	74	96	123	154					35	45	61		3.86	S			S	
LBP	TLES5KK.2	102H4535	on request			28	41	57	76	99	126	159	196					44	57	80		5.08	S			S	
	TLX4.8KK.3	102H4541	195B0565			29	42.1	57	74.2	94.2	117							34.5	46.5	65.5		4.78	S*			S*	
	TLES5.7KK.3	102H4638	195B0366			36.4	50.7	68	89	114	144							50.1	66.5	93.4		5.70	S			S	
	TLX8.7KK.3	102H4947	195B0361			64.8	87.9	115	146	184	227							65.7	87.7	123		8.67	S*			S*	
	NLX10KK.2	105H6101	195B0405			74.5	101	133	171	217	271							63.5	89.5	134		10.09	S*			S*	
	NLE10KK.2	105H6851	195B0409			67	91	120	155	198	249							82	109	157		10.09	S			S	
	NLE10KK.4	105H6867	195B0517			73.9	98.3	128	164	207	257							81.3	108	161		10.09	S			S	

Test condition
EN 12900/CECOMAF LBP
 Condensing temperature: 45 °C
 Ambient temperature: 32 °C
 Suction gas temperature: 20 °C
 Liquid temperature no subcooling

Reciprocating compressors R134a

Application	Compressor	Code numbers			EN 12900 (CECOMAF) Capacity [W]												Power consumption (W)				Displacement						
		Compressor	Compressor single pack with HST equipment	Compressor with oil cooling	Evaporating temperature [°C]												Evap temp. (°C)										
					-45	-40	-35	-30	-20	-15	-10	-5	0	5	10	15	20	-35	-25	-10		5	[cm³]				
LBP	TL4F	102G4400							31	44	81	107	137													3.86	
	TL5F	102G4501							43	60	110	144	183													5.08	
	TL55F	102G4520							48	71	131	170	216													5.08	
	TL56F	102G4620							58	77	139	183	235													5.70	
	TL57F	102G4720							66	89	160	208	264													6.49	
	NL6F	105G6606							52	77	151	200	258													6.13	
	NL7F	105G6706							71	99	182	238	303													7.27	
	NL8F	105G6822							82	112	194	249	317													7.95	
	NL9F	105G6802							74	111	207	268	340													8.35	
	NL11F	105G6900							102	146	268	351	453													11.15	
	SC15F	104G8500			105G6910				100	155	325	439	573	726													15.28
	SC18F	104G8800			104G8810				129	194	388	518	669	842													17.69
	SC21F	104G8100			104G8110				186	246	455	610	780	987													20.95

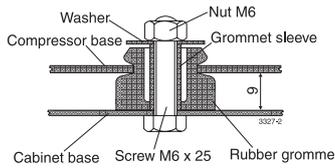
Test condition
EN 12900/CECOMAF LBP
 Condensing temperature: 55 °C
 Ambient temperature: 32 °C
 Suction gas temperature: 32 °C
 Liquid temperature no subcooling

compressor cooling temperature compulsory)					Voltage and frequencies	Electrical Equipment										Dimensions					
						LST (RSIR)		LST (RSCR)		Run capacitor		HST (CSIR)		HST (CSR)	LST/HST		Height [mm]		Connectors location/I.D. [mm]		
PTC Starting device w/o run capacitor connector		PTC device with run capacitor connector		1 optional 2 compulsory		Starting relay	Starting capacitor	Starting unit	Cord relief	Cover											
spades		spades		spades		spades		spades													
38°C		43°C			6.3 mm	4.8 mm	6.3 mm	4.8 mm	6.3 mm	6.3 mm	6.3 mm	A	B	C	D	E					
MBP	HBP	LBP	MBP	HBP	6.3 mm	4.8 mm	6.3 mm	4.8 mm	6.3 mm	6.3 mm	6.3 mm	A	B	C	D	E					
F ₁		F ₁	F ₁		1	103N0011	103N0018				117U7004	117U5014		103N1010	103N2010	163	159	6.2	6.2	5.0	
F ₁		F ₁	F ₁		1	103N0011	103N0018				117U7004	117U5014		103N1010	103N2010	173	169	6.2	6.2	5.0	
F ₁		F ₁	F ₁		1	103N0011	103N0018	103N0016	103N0021	117-7117 ¹	117-7119 ¹	117U7000	117U5014		103N1010	103N2010	173	169	6.2	6.2	5.0
F ₁		F ₁	F ₂		1	103N0011	103N0018	103N0016	103N0021	117-7117 ¹	117-7119 ¹	117U7002	117U5015		103N1010	103N2010	203	197	8.2	6.2	6.2
F ₁		F ₂	F ₂		1	103N0011	103N0018	103N0016	103N0021	117-7117 ¹	117-7119 ¹	117U7002	117U5015		103N1010	103N2010	203	197	8.2	6.2	6.2
F ₂		F ₂	F ₂		1								117-7049	103N1004	103N2009	209	203	8.2	6.2	6.2	
F ₂		F ₂	F ₂		1								117-7049	103N1004	103N2009	209	203	8.2	6.2	6.2	
F ₂		F ₂	F ₂		1								117-7051	103N1004	103N2009	209	203	8.2	6.2	6.2	
F ₂		F ₂	F ₂		1								117-7034	103N1004	103N2009	219	213	10.2	6.2	6.2	
		F ₂			1						117U7003	117U5017		103N1004	103N2009	209	203	8.2	6.2	6.2	
		F ₂			1						117U7005	117U5017		103N1004	103N2009	209	203	8.2	6.2	6.2	
		F ₂			1						117U7011	117U5017		103N1004	103N2009	219	213	10.2	6.2	6.2	
		F ₂			1						117U7013	117U5012		103N1004	103N2009	219	213	10.2	6.2	6.2	
		F ₂			1	105N46xx series controllers						103N1004	103N2009	199	193	10.2	6.2	6.2			

compressor cooling temperature compulsory)					Voltage and frequencies	Electrical Equipment										Dimensions				
						LST (RSIR)		LST (RSCR)		Run capacitor		HST (CSIR)		HST (CSR)	LST/HST		Height [mm]		Connectors location/I.D. [mm]	
PTC Starting device w/o run capacitor connector		PTC device with run capacitor connector		1 optional 2 compulsory		Starting relay	Starting capacitor	Starting unit	Cord relief	Cover										
spades		spades		spades		spades		spades												
38°C		43°C			6.3 mm	4.8 mm	6.3 mm	4.8 mm	6.3 mm	6.3 mm	6.3 mm	A	B	C	D	E				
MBP	HBP	LBP	MBP	HBP	6.3 mm	4.8 mm	6.3 mm	4.8 mm	6.3 mm	6.3 mm	6.3 mm	A	B	C	D	E				
S					1			103N0016	103N0021	117-7117 ²	117-7119 ²			103N1010	103N0491	137	135	6.2	6.2	5.0
					1	103N0011	103N0018	103N0016	103N0021	117-7117 ¹	117-7119 ¹			103N1010	103N2010	173	169	6.2	6.2	5.0
					1	103N0011	103N0018	103N0016	103N0021	117-7117 ¹	117-7119 ¹			103N1010	103N2010	173	169	6.2	6.2	5.0
		S*			1			103N0016	103N0021	117-7131 ²	117-7132 ²			103N1010	103N2010	173	169	6.2	6.2	5.0
		S			1	103N0011	103N0018	103N0016	103N0021	117-7117 ¹	117-7119 ¹			103N1010	103N2010	163	159	6.2	6.2	5.0
		S*			1			103N0016	103N0021	117-7117 ²	117-7119 ²			103N1010	103N2010	173	169	6.2	6.2	5.0
		S*			1			103N0016	103N0021		117-7136 ²			103N1010	103N2010	203	197	6.2	6.2	5.0
		S			1	103N0011	103N0018	103N0016	103N0021	117-7117 ¹	117-7119 ¹			103N1010	103N2010	197	191	6.2	6.2	5.0
		S			1	103N0011	103N0018	103N0016	103N0021	117-7117 ¹	117-7119 ¹			103N1010	103N2010	190	183	6.2	6.2	5.0

PL/PLE	TL	TLS/TLES/TLX	SLV
NL/NLE/NLX	NF	FR	
SC	GS	BD	
<p>Note: On GS34CLX compressors suction and process connectors are interchanged.</p>			

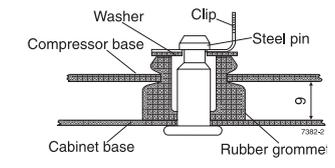
Mounting accessories



Washer, Nut M6, Compressor base, Grommet sleeve, Cabinet base, Screw M6 x 25, Rubber grommet

Bolt joint for one compressor: 118-1917
in quantities: 118-1918

Bolt joint for one GS compressor: 107B9150
(M8 x 40, base plate distance: 17 mm)

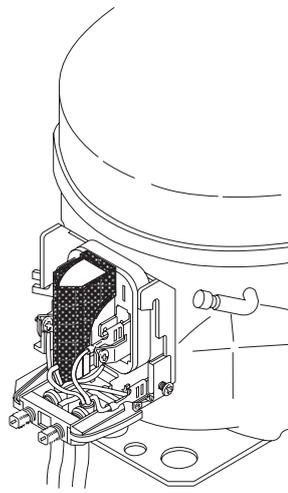


Washer, Clip, Compressor base, Steel pin, Cabinet base, Rubber grommet

Snap-on in quantities: 118-1919

Protection Screen for PTC

Note: To fulfil the requirements of EN 60355-2-34 the protection screen 103N0476 must be applied to the PTC starting device.



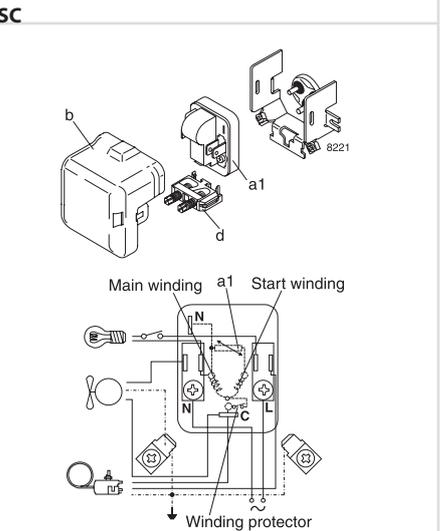
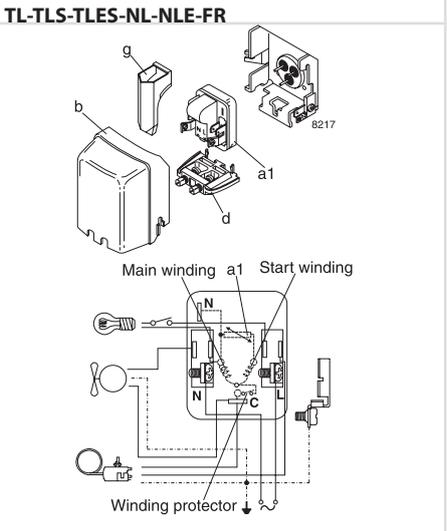
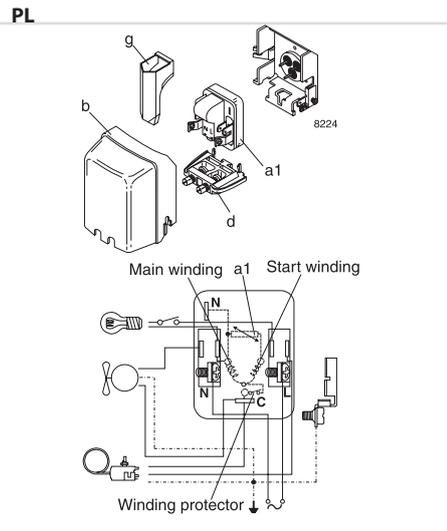
Model designation

Compressor design	Optimization level	Compressor size	Application range	Start characteristics	Generation
PL			CL R404A/ R507 LBP		
TL			CN R290 LBP (MBP)		
NL	Blank Standard energy level	Nominal displacement in cm ³	F R134a LBP/(MBP)	Blank => universal (principal rule)	Blank => first generation
	S Semi-direct intake	Exception: For PL compressors the capacity at rating point is stated.	FT R134a LBP tropical		.2 => second generation
FR	E Energy- optimized		G R134a LBP/ MBP/HBP	X = HST characteristics (expansion valve)	.3 => third generation
SC			GH R134a Heat Pumps		
			GHH R134a Heat Pumps optimized		etc.
GS			K R600a, LBP/(MBP)		
			MF R134a MBP		
			ML R404A/ R507 MBP		

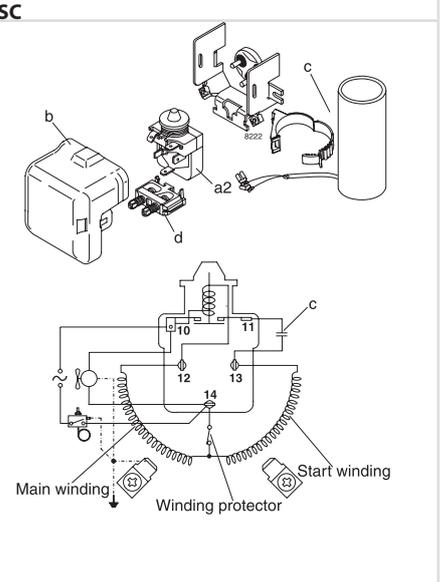
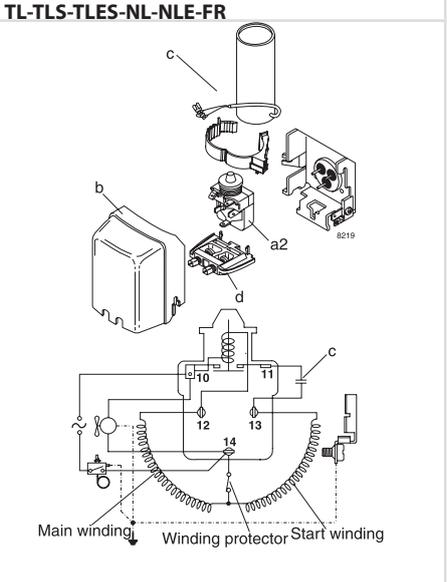
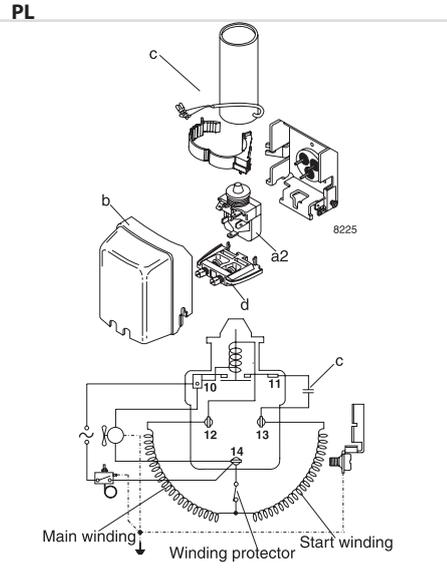
Examples

TL	ES	5.7	FT		.3
NL	E	10	MF		
SC		15	CN	X	.2

LST - RSIR

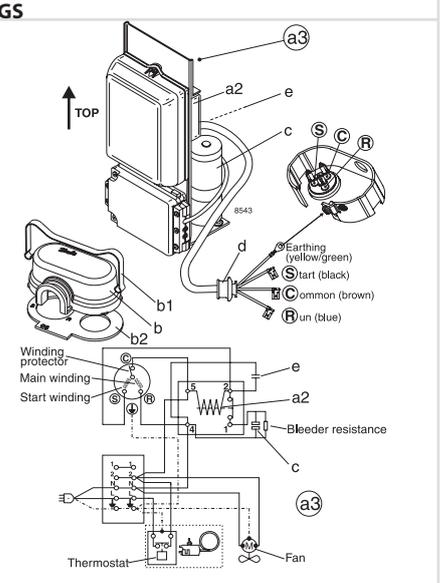
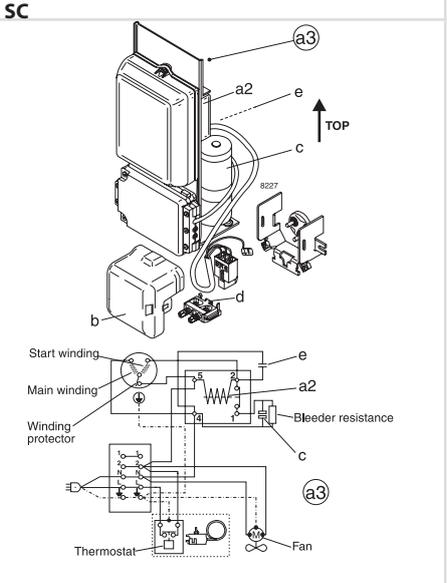
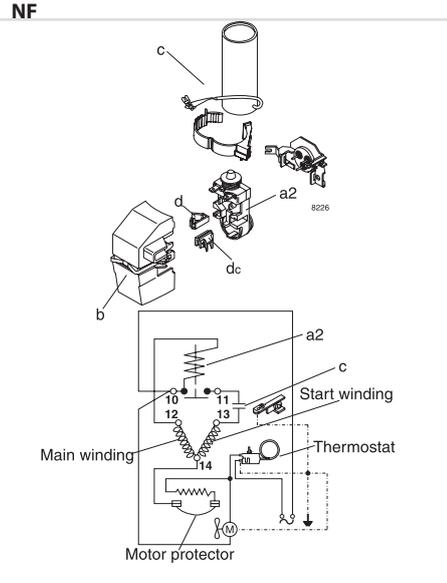


HST - CSIR



HST - CSIR

HST - CSIR

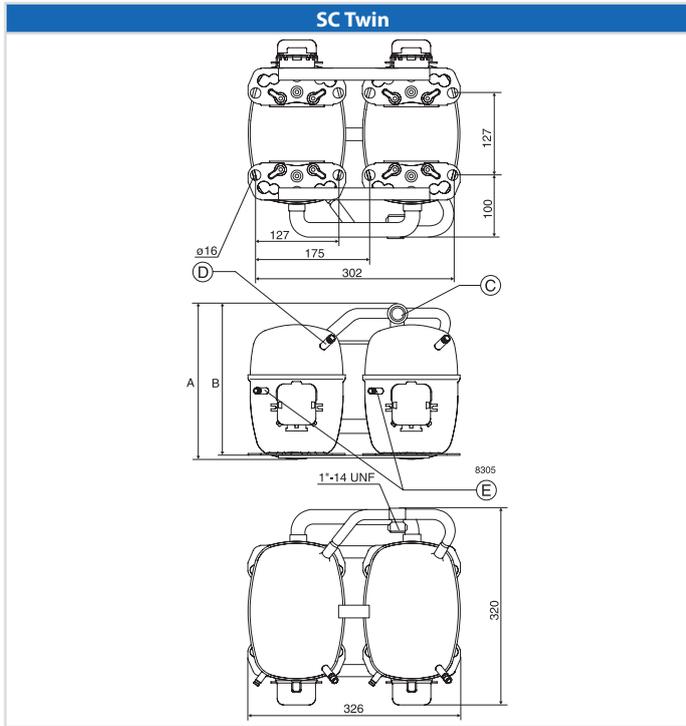


Legend

- a1:** PTC starting device
- a2:** Starting relay
- a3:** Starting device

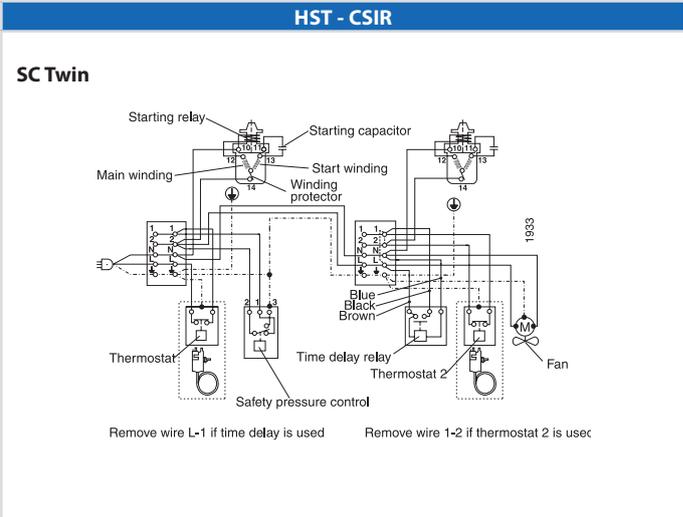
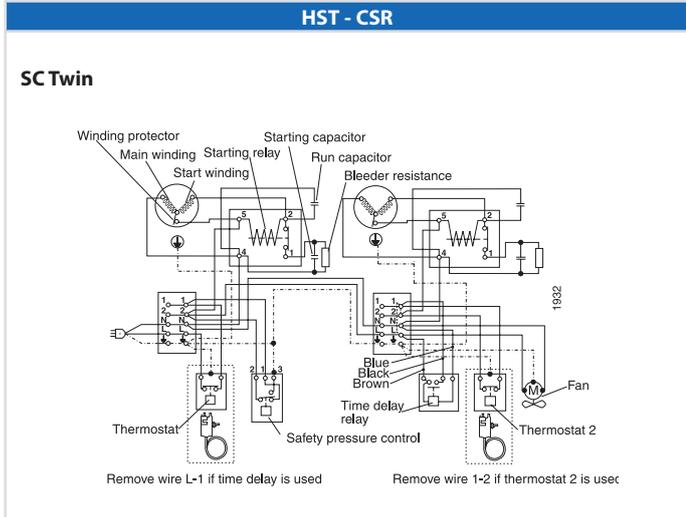
- b:** Cover
- b1:** Clamp (part of compressor)
- b2:** Gasket (part of compressor)

- c:** Starting capacitor
- d:** Cord relief
- e:** Run capacitor
- g:** Protection screen for PTC



Accessories for SC Twin

SC10/10, SC12/12 and SC15/15:	
Service valve for 12 mm tube	118-7350
Solder connector for 12 mm tube	104B0584
SC18/18 and SC21/21:	
Service valve for 16 mm tube	118-7351
Solder connector for 16 mm tube	118-7405
SC10/10, SC12/12, SC15/15, SC18/18 and SC21/21:	
Seal ring for service valve and solder connector	118-3638
Time-delay relay	117N0001
Check valve (to be used with time-delay relay)	020-1014



Applications

- LBP:** Low Back Pressure
- MBP:** Medium Back Pressure
- HBP:** High Back Pressure

Motor types

- RSIR:** Resistant Start Induction Run
- RSR:** Resistant Start Capacitor Run
- CSIR:** Capacitor Start Induction Run
- CSR:** Capacitor Start Run

Starting devices

LST: Low Starting Torque
LST is used with capillary tube control and pressure equalizing. (Pressure equalizing may exceed 10 minutes). The PTC starting device requires 5 minutes cooling before each start.

HST: High Starting Torque
HST consisting of relay and starting capacitor, is used for expansion valve control or for capillary tube control without pressure equalizing.

Test conditions EN 12900 (CECOMAF)

Application	R134a	R404A/R507
Condensing temperature	55°C	45°C
Ambient temperature	32°C	32°C
Suction gas temperature	32°C	32°C
No subcooling		
PL/TL/TLS/NL/FR/SC: 220 V 50 Hz		
BD: 12 V, 24V or 56 V DC		

Test conditions ASHRAE

Application	R600a	R404A/R507
Condensing temperature	54.4°C	45°C
Ambient temperature	32°C	32°C
Suction gas temperature	32°C	32°C
Liquid temperature	32°C	32°C
12 V, 24V or 56 V DC		

Test conditions EN 12900

Application	LBP	MBP	HBP
Condensing temperature	40°C	45°C	50°C
Ambient temperature	32°C	32°C	32°C
Suction gas temperature	20°C	20°C	20°C
Liquid temperature	no subcooling		
220 V 50 Hz			

Electrical equipment GS compressors

* = Gasket/cover/clamp are parts of compressor

Compressor cooling

- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s (compressor compartment temp. equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary
- ** = run capacitor 4 µF compulsory

Voltages and frequencies

- 1 = 198-254 V, 50 Hz
- 2 = 187-254 V, 50 Hz, LBP
- 3 = 198-254 V, 60 Hz, LBP
- 4 = 198-254 V, 60 Hz, HBP
- 5 = 198-254 V, 60 Hz, MBP
- 6 = 207-254 V, 60 Hz, HBP
- 7 = 187-254 V, 50 Hz, MBP
- 8 = 187-254 V, 60 Hz, MBP
- 9 = 187-254 V, 60 Hz, LBP

1 Watt = 0.86 kcal/h
1 Watt = 3.41 Btu/h

Reciprocating compressors – Commercial

Performance data

NTZ R404A / R507A	Model	To	-45			-40		-35		-30		-25		-20		-15		-10	
		Tc	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	
	NTZ048	45	190	0.35	420	0.59	710	0.84	1 240	1.09	1 700	1.34	2 240	1.57	2 860	1.79	3 570	1.99	
NTZ068	45	520	1.02	870	1.28	1 290	1.54	2 110	1.81	2 785	2.09	3 570	2.38	4 490	2.68	5 540	2.99		
NTZ096	45	-	-	910	1.29	1 420	1.67	2 430	2.09	3 360	2.53	4 510	2.99	5 900	3.47	7 550	3.97		
NTZ108	45	-	-	1 120	1.57	1 770	2.03	3 010	2.49	4 080	2.95	5 340	3.40	6 800	3.85	8 530	4.29		
NTZ136	45	-	-	1 570	2.27	2 360	2.86	3 890	3.47	5 200	4.08	6 750	4.69	8 570	5.29	10 710	5.87		
NTZ215	45	1 190	2.31	2 240	3.17	3 540	4.08	5 970	5.01	8 030	5.94	10 440	6.86	13 220	7.72	16 420	8.52		
NTZ271	45	2 120	3.57	3 470	4.61	5 140	5.66	8 380	6.73	11 050	7.81	14 190	8.90	17 840	10.00	22 040	11.10		
NTZ430	45	2 370	4.61	4 480	6.33	7 080	8.15	11 930	10.02	16 060	11.89	20 880	13.71	26 450	15.44	32 840	17.04		
NTZ542	45	4 240	7.14	6 940	9.21	10 290	11.32	16 760	13.46	22 110	15.62	28 380	17.80	35 670	19.99	44 080	22.20		

Legend: To: Evaporating temperature in °C Qo: Cooling capacity in W Superheat = 10K; Subcooling = 0 K Voltage: 400 V / 3 / 50 Hz
 Tc: Condensing temperature in °C Pe: Power input in kW Suction temp. = 20°C; Subcooling = 0 K

MT R22	Model	To	-25		-20		-15		-10		-5		0		5		10		15	
		Tc	Qo	Pe	Qo	Pe														
	MT018	45	570	0.64	890	0.76	1 300	0.88	1 810	1.00	2 450	1.10	3 220	1.19	4 150	1.26	5 260	1.31	6 550	1.33
MT022	45	740	0.77	1 280	0.95	1 920	1.12	2 670	1.29	3 540	1.44	4 560	1.56	5 720	1.66	7 040	1.73	8 550	1.76	
MT028	45	1 460	1.22	2 190	1.43	3 030	1.63	4 000	1.81	5 090	1.98	6 330	2.11	7 720	2.20	9 280	2.25	11 000	2.24	
MT032	45	1 550	1.46	2 310	1.68	3 190	1.90	4 230	2.11	5 440	2.31	6 830	2.47	8 420	2.60	10 200	2.69	12 300	2.74	
MT036	45	1 960	1.68	2 890	1.90	3 950	2.13	5 150	2.35	6 500	2.56	8 020	2.76	9 710	2.93	11 600	3.07	13 700	3.17	
MT040	45	2 050	1.77	3 080	2.08	4 260	2.39	5 590	2.67	7 090	2.93	8 780	3.15	10 700	3.32	12 800	3.42	15 100	3.45	
MT044	45	1 920	1.70	2 760	1.97	3 850	2.22	5 210	2.46	6 880	2.68	8 880	2.88	11 200	3.07	14 000	3.23	17 100	3.38	
MT050	45	2 170	1.93	3 300	2.31	4 660	2.65	6 290	2.94	8 210	3.20	10 500	3.42	13 000	3.61	16 000	3.77	19 400	3.92	
MT056	45	2 680	2.20	3 770	2.55	5 170	2.88	6 910	3.18	9 020	3.46	11 500	3.72	14 500	3.96	17 900	4.18	21 900	4.38	
MT064	45	3 140	2.40	4 580	2.85	6 290	3.27	8 310	3.64	10 700	3.98	13 400	4.27	16 600	4.53	20 200	4.76	24 300	4.94	
MT072	45	3 240	2.61	4 950	3.20	6 960	3.72	9 340	4.19	12 100	4.60	15 300	4.96	19 000	5.27	23 300	5.54	28 100	5.78	
MT080	45	4 230	3.32	6 180	3.89	8 450	4.41	11 100	4.89	14 200	5.33	17 700	5.72	21 700	6.09	26 300	6.42	31 500	6.72	
MT100	45	4 570	4.06	6 650	4.66	9 150	5.25	12 100	5.79	15 700	6.27	19 900	6.66	24 700	6.94	30 400	7.09	36 800	7.08	
MT125	45	6 690	5.48	9 360	6.17	12 500	6.87	16 400	7.55	20 800	8.18	26 100	8.75	32 200	9.24	39 300	9.63	47 400	9.88	
MT144	45	7 700	6.16	10 700	6.94	14 200	7.71	18 500	8.47	23 600	9.17	29 600	9.81	36 600	10.36	44 700	10.80	54 000	11.09	
MT160	45	8 660	6.93	11 900	7.79	15 800	8.65	20 600	9.49	26 200	10.28	32 800	11.00	40 500	11.61	49 500	12.10	59 800	12.44	
MTM200	45	9 140	8.12	13 300	9.32	18 300	10.49	24 300	11.58	31 400	12.54	39 700	13.32	49 500	13.89	60 700	14.19	73 600	14.17	
MTM250	45	13 400	10.95	18 700	12.35	25 100	13.74	32 700	15.09	41 700	16.36	52 200	17.51	64 500	18.49	78 600	19.25	94 800	19.77	
MTM288	45	15 400	12.32	21 300	13.87	28 500	15.42	37 000	16.93	47 200	18.35	59 200	19.63	73 200	20.72	89 400	21.59	108 000	22.18	
MTM320	45	17 300	13.86	23 800	15.58	31 700	17.30	41 100	18.98	52 300	20.57	65 600	22.00	81 000	23.23	98 900	24.20	119 500	24.88	

MTZ R407C	Model	To	-15		-10		-5		0		5		10		15	
		Tc	Qo	Pe	Qo	Pe										
	MTZ018	45	1 180	0.82	1 750	0.94	2 430	1.04	3 240	1.13	4 180	1.20	5 270	1.25	6 530	1.30
MTZ022	45	1 770	1.07	2 490	1.24	3 330	1.39	4 320	1.50	5 460	1.60	6 790	1.67	8 310	1.73	
MTZ028	45	2 160	1.30	3 110	1.52	4 220	1.72	5 520	1.89	7 030	2.03	8 770	2.13	10 800	2.21	
MTZ032	45	2 710	1.50	3 740	1.75	4 940	1.95	6 330	2.12	7 940	2.27	9 800	2.38	11 900	2.48	
MTZ036	45	3 270	1.81	4 400	2.10	5 710	2.36	7 200	2.57	8 920	2.73	10 900	2.86	13 100	2.95	
MTZ040	45	3 890	2.18	5 150	2.48	6 610	2.74	8 290	2.98	10 200	3.18	12 400	3.35	15 000	3.48	
MTZ044	45	3 570	1.97	4 920	2.28	6 590	2.54	8 610	2.76	11 000	2.94	13 800	3.10	17 100	3.24	
MTZ050	45	4 200	2.34	5 780	2.70	7 650	3.00	9 860	3.24	12 500	3.45	15 500	3.61	19 000	3.75	
MTZ056	45	4 540	2.50	6 310	2.90	8 440	3.24	11 000	3.53	13 900	3.77	17 400	3.98	21 400	4.16	
MTZ064	45	5 550	2.91	7 480	3.35	9 820	3.73	12 600	4.05	15 900	4.32	19 800	4.57	24 300	4.79	
MTZ072	45	6 300	3.49	8 540	3.96	11 200	4.39	14 400	4.77	18 200	5.11	22 600	5.39	27 700	5.63	
MTZ080	45	7 290	4.08	9 860	4.64	12 900	5.12	16 400	5.54	20 600	5.89	25 300	6.19	30 800	6.45	
MTZ100	45	7 870	4.81	11 000	5.47	14 800	6.04	19 300	6.52	24 500	6.92	30 700	7.26	37 800	7.56	
MTZ125	45	11 500	6.13	15 500	6.97	20 100	7.69	25 600	8.31	31 900	8.84	39 300	9.30	47 700	9.69	
MTZ144	45	12 700	7.07	17 000	7.92	22 200	8.70	28 200	9.42	35 300	10.04	43 500	10.58	52 900	11.01	
MTZ160	45	15 400	8.21	20 200	9.20	25 800	10.09	32 500	10.91	40 300	11.68	49 400	12.42	59 900	13.16	
MTZ200	45	15 700	9.61	22 000	10.94	29 600	12.08	38 600	13.03	49 100	13.84	61 400	14.53	75 500	15.11	
MTZ250	45	23 000	12.26	30 900	13.93	40 200	15.37	51 100	16.61	63 800	17.68	78 500	18.59	95 400	19.38	
MTZ288	45	25 300	14.13	34 000	15.83	44 400	17.41	56 500	18.83	70 600	20.09	87 000	21.16	105 900	22.02	
MTZ320	45	30 700	16.43	40 300	18.39	51 700	20.17	65 100	21.81	80 700	23.36	98 800	24.85	119 700	26.32	

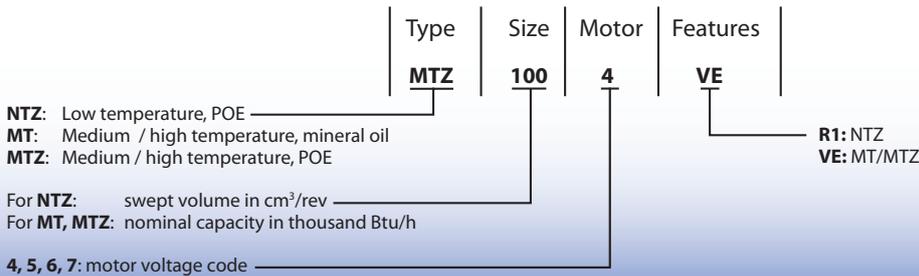
Legend: To: Evaporating temperature in °C Qo: Cooling capacity in W Superheat = 11.1 K Voltage: 400 V / 3 / 50 Hz
 Tc: Condensing temperature in °C Pe: Power input in kW Subcooling = 8.3 K

Performance data

Model	To	-15		-10		-5		0		5		10		15		20		
		Tc	Qo	Pe	Qo	Pe												
		MTZ018	45	700	0.61	1050	0.69	1470	0.76	1970	0.82	2570	0.87	3270	0.91	4090	0.93	5020
MTZ022	45	940	0.72	1370	0.81	1900	0.91	2550	0.99	3320	1.06	4240	1.11	5310	1.15	6560	1.16	
MTZ028	45	1230	0.91	1720	1.02	2350	1.13	3130	1.23	4090	1.34	5260	1.43	6650	1.51	8300	1.58	
MTZ032	45	1430	1.09	2020	1.25	2770	1.40	3690	1.54	4810	1.66	6160	1.76	7760	1.83	9630	1.86	
MTZ036	45	2050	1.29	2740	1.45	3580	1.60	4590	1.74	5780	1.86	7170	1.97	8790	2.05	10660	2.10	
MTZ040	45	2450	1.47	3160	1.61	4000	1.75	4980	1.89	6100	2.01	7390	2.12	8860	2.21	10520	2.27	
MTZ044	45	2080	1.29	2910	1.49	3940	1.67	5190	1.83	6710	1.95	8540	2.05	10710	2.13	13270	2.17	
MTZ050	45	2360	1.57	3340	1.80	4560	2.00	6040	2.17	7820	2.31	9950	2.42	12470	2.51	15410	2.57	
MTZ056	45	2290	1.64	3380	1.88	4730	2.11	6400	2.31	8420	2.49	10820	2.64	13650	2.77	16940	2.86	
MTZ064	45	2700	1.87	4010	2.17	5600	2.43	7510	2.67	9780	2.87	12440	3.04	15550	3.18	19130	3.27	
MTZ072	45	3200	2.16	4660	2.50	6430	2.81	8560	3.08	11090	3.33	14070	3.54	17540	3.74	21560	3.92	
MTZ080	45	4130	2.59	5700	2.93	7620	3.24	9950	3.54	12740	3.80	16040	4.05	19920	4.27	24430	4.48	
MTZ100	45	4660	3.25	6550	3.65	8860	4.02	11680	4.35	15050	4.63	19050	4.84	23730	4.96	29170	4.98	
MTZ125	45	5870	3.63	8230	4.17	11090	4.69	14520	5.16	18590	5.57	23380	5.89	28950	6.09	35380	6.18	
MTZ144	45	7880	4.85	10680	5.40	14060	5.94	18090	6.46	22850	6.93	28420	7.34	34870	7.67	42290	7.92	
MTZ160	45	8770	5.23	11800	5.84	15470	6.45	19890	7.06	25130	7.65	31300	8.21	38480	8.72	46760	9.18	
MTZ200	45	9320	6.50	13090	7.29	17730	8.04	23350	8.70	30100	9.26	38090	9.68	47460	9.92	58340	9.96	
MTZ250	45	11740	7.25	16460	8.35	22180	9.39	29040	10.33	37190	11.14	46760	11.77	57910	12.19	70770	12.35	
MTZ288	45	15750	9.71	21370	10.81	28130	11.89	36190	12.91	45710	13.85	56840	14.67	69750	15.35	84580	15.84	
MTZ320	45	17540	10.46	23600	11.67	30950	12.90	39780	14.11	50260	15.29	62590	16.41	76950	17.44	93530	18.37	

Model	To	-30		-25		-20		-15		-10		-5		0		5		10		
		Tc	Qo	Pe	Qo	Pe														
		MTZ018	45	390	0.69	650	0.83	980	0.96	1400	1.09	1900	1.21	2520	1.31	3250	1.40	4110	1.47	5120
MTZ022	45	640	0.86	980	1.03	1410	1.19	1960	1.34	2620	1.48	3440	1.61	4410	1.72	5550	1.82	6880	1.90	
MTZ028	45	760	1.05	1250	1.30	1850	1.53	2570	1.75	3430	1.96	4450	2.14	5640	2.31	7040	2.45	8640	2.56	
MTZ032	45	1040	1.20	1580	1.46	2240	1.71	3030	1.94	3980	2.16	5110	2.36	6440	2.55	7980	2.71	9760	2.86	
MTZ036	45	1300	1.50	1930	1.78	2690	2.06	3600	2.33	4670	2.58	5930	2.81	7400	3.01	9100	3.19	11050	3.34	
MTZ040	45	1600	1.70	2320	2.05	3160	2.37	4160	2.67	5330	2.95	6700	3.20	8290	3.44	10130	3.65	12230	3.84	
MTZ044	45	1360	1.60	2100	1.94	2990	2.25	4070	2.52	5370	2.77	6910	3.00	8740	3.20	10890	3.38	13370	3.54	
MTZ050	45	1700	1.94	2500	2.29	3510	2.62	4750	2.93	6260	3.22	8070	3.48	10220	3.71	12740	3.91	15680	4.07	
MTZ056	45	1730	2.04	2620	2.43	3710	2.81	5060	3.17	6710	3.51	8690	3.83	11060	4.11	13840	4.36	17090	4.57	
MTZ064	45	2160	2.32	3200	2.83	4480	3.32	6060	3.78	7980	4.20	10300	4.60	13070	4.96	16330	5.28	20150	5.55	
MTZ072	45	2550	2.74	3670	3.25	5080	3.75	6810	4.23	8920	4.69	11450	5.11	14450	5.51	17970	5.87	22050	6.19	
MTZ080	45	3170	3.15	4530	3.85	6170	4.48	8130	5.07	10470	5.61	13230	6.11	16470	6.57	20240	7.01	24580	7.41	
MTZ100	45	3240	4.01	4930	4.80	6960	5.53	9390	6.18	12280	6.76	15700	7.26	19710	7.70	24370	8.06	29760	8.34	
MTZ125	45	4660	5.16	6620	6.02	9060	6.86	12060	7.67	15710	8.44	20080	9.16	25250	9.83	31300	10.44	38310	10.98	
MTZ144	45	5700	6.08	8060	7.05	10920	8.00	14370	8.91	18490	9.78	23380	10.60	29110	11.36	35770	12.06	43450	12.69	
MTZ160	45	6280	6.80	8870	7.95	12010	9.04	15790	10.08	20310	11.08	25640	12.05	31900	13.01	39160	13.97	47540	14.95	
MTZ200	45	6480	8.02	9860	9.60	13920	11.05	18770	12.36	24560	13.52	31400	14.53	39420	15.39	48750	16.11	59510	16.68	
MTZ250	45	9320	10.32	13230	12.05	18110	13.73	24120	15.34	31420	16.88	40160	18.32	50500	19.66	62600	20.88	76620	21.96	
MTZ288	45	11410	12.17	16120	14.11	21840	16.00	28740	17.82	36990	19.56	46760	21.20	58220	22.72	71550	24.12	86900	25.37	
MTZ320	45	12550	13.61	17740	15.90	24030	18.08	31590	20.15	40610	22.15	51280	24.10	63790	26.03	78330	27.95	95070	29.90	

Legend: To: Evaporating temperature in °C Qo: Cooling capacity in W Superheat = 10 K Voltage: 400 V / 3 / 50 Hz
Tc: Condensing temperature in °C Pe: Power input in kW Subcooling = 0 K

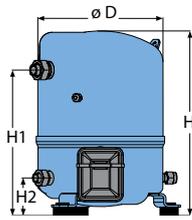


Reciprocating compressors – Commercial

Model	4	5	6	7	Swept volume cm ³ /rev	Displacement m ³ /h at 2900 rpm	Cylinder number	Oil charge dm ³	Net weight kg	
	460/3/60 400/3/50	230/1/50	230/3/50	575/3/60 500/3/50						
Low back pressure Applications	NTZ048	120F0001	120F0087		48	8.4	1	0.95	21	
	NTZ068	120F0002	120F0088		68	11.8	1	0.95	23	
	NTZ096	120F0003			96	16.7	2	1.8	35	
	NTZ108	120F0004			108	18.7	2	1.8	35	
	NTZ136	120F0005			136	23.6	2	1.8	35	
	NTZ215	120F0006			215	37.5	4	3.9	62	
	NTZ271	120F0007			271	47.3	4	3.9	64	
	NTZ430	120F0024			2 x 215	2 x 37.5	2 x 4	2 x 3.9	138	
	NTZ542	120F0025			2 x 271	2 x 47.3	2 x 4	2 x 2.9	142	
Medium -High back pressure Applications	MT018	MT18-4VI	MT18-5VI		30	5.3	1	0.95	21	
	MT022	MT22-4VI	MT22-5VI	MT22-6VI	38	6.6	1	0.95	21	
	MT028	MT28-4VI	MT28-5VI	MT28-6VI	48	8.4	1	0.95	23	
	MT032	MT32-4VI	MT32-5VI	MT32-6VI	54	9.4	1	0.95	24	
	MT036	MT36-4VI	MT36-5VI	MT36-6VI	60	10.5	1	0.95	25	
	MT040	MT40-4VI		MT40-6VI	68	11.8	1	0.95	26	
	MT044	MT44-4VI		MT44-6VI	MT44-7VI	76	13.3	2	1.8	35
	MT050	MT50-4VI	MT50-5VI	MT50-6VI	MT50-7VI	86	14.9	2	1.8	35
	MT056	MT56-4VI		MT56-6VI	MT56-7VI	96	16.7	2	1.8	37
	MT064	MT64-4VI		MT64-6VI		108	18.7	2	1.8	37
	MT072	MT72-4VI		MT72-6VI		121	21.0	2	1.8	40
	MT080	MT80-4VI		MT80-6VI		136	23.6	2	1.8	40
	MT100	MT100-4VI		MT100-6VI	MT100-7VI	171	29.8	4	3.9	60
	MT125	MT125-4VI		MT125-6VI	MT125-7VI	215	37.5	4	3.9	64
	MT144	MT144-4VI		MT144-6VI	MT144-7VI	242	42.1	4	3.9	67
	MT160	MT160-4VI		MT160-6VI	MT160-7VI	272	47.3	4	3.9	69
	MTM200	MTM200T4SA		MTM200T6SA		2 x 171	2 x 29.8	2 x 4	2 x 3.9	134
	MTM250	MTM250T4SA		MTM250T6SA		2 x 215	2 x 37.5	2 x 4	2 x 3.9	142
	MTM288	MTM288T4SA		MTM288T6SA		2 x 242	2 x 42.1	2 x 4	2 x 3.9	148
	MTM320	MTM320T4SA		MTM320T6SA		2 x 272	2 x 47.3	2 x 4	2 x 3.9	152
	MTZ018	MTZ18-4VI	MTZ18-5VI	MTZ18-6VI		30	5.3	1	0.95	21
	MTZ022	MTZ22-4VI	MTZ22-5VI	MTZ22-6VI		38	6.6	1	0.95	21
	MTZ028	MTZ28-4VI	MTZ28-5VI	MTZ28-6VI		48	8.4	1	0.95	23
	MTZ032	MTZ32-4VI	MTZ32-5VI	MTZ32-6VI	MTZ32-7VI	54	9.4	1	0.95	24
	MTZ036	MTZ36-4VI	MTZ36-5VI	MTZ36-6VI	MTZ36-7VI	60	10.5	1	0.95	25
	MTZ040	MTZ40-4VI		MTZ40-6VI		68	11.8	1	0.95	26
	MTZ044	MTZ44-4VI		MTZ44-6VI	MTZ44-7VI	76	13.3	2	1.8	35
	MTZ050	MTZ50-4VI	MTZ50-5VI	MTZ50-6VI	MTZ50-7VI	86	14.9	2	1.8	35
	MTZ056	MTZ56-4VI		MTZ56-6VI	MTZ56-7VI	96	16.7	2	1.8	37
	MTZ064	MTZ64-4VI		MTZ64-6VI		108	18.7	2	1.8	37
	MTZ072	MTZ72-4VI		MTZ72-6VI		121	21.0	2	1.8	40
	MTZ080	MTZ80-4VI		MTZ80-6VI		136	23.6	2	1.8	40
MTZ100	MTZ100-4VI		MTZ100-6VI	MTZ100-7VI	171	29.8	4	3.9	60	
MTZ125	MTZ125-4VI		MTZ125-6VI	MTZ125-7VI	215	37.5	4	3.9	64	
MTZ144	MTZ144-4VI		MTZ144-6VI	MTZ144-7VI	242	42.1	4	3.9	67	
MTZ160	MTZ160-4VI		MTZ160-6VI	MTZ160-7VI	272	47.3	4	3.9	69	
MTZ200	MTZ200T4SA		MTZ200T6SA		2 x 171	2 x 29.8	2 x 4	2 x 3.9	134	
MTZ250	MTZ250T4SA		MTZ250T6SA		2 x 215	2 x 37.5	2 x 4	2 x 3.9	142	
MTZ288	MTZ288T4SA		MTZ288T6SA		2 x 242	2 x 42.1	2 x 4	2 x 3.9	148	
MTZ320	MTZ320T4SA		MTZ320T6SA		2 x 272	2 x 47.3	2 x 4	2 x 3.9	152	

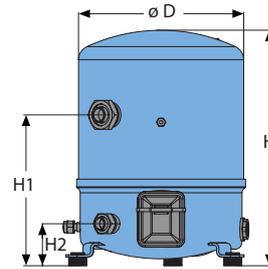
Dimensions

**MT / MTZ / NTZ
1 cylinder**



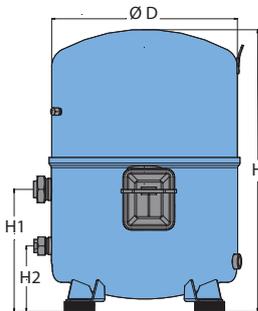
D : 224 mm
H : 333/358 mm
H1 : 263 mm
H2 : 68 mm

**MT / MTZ / NTZ
2 cylinders**



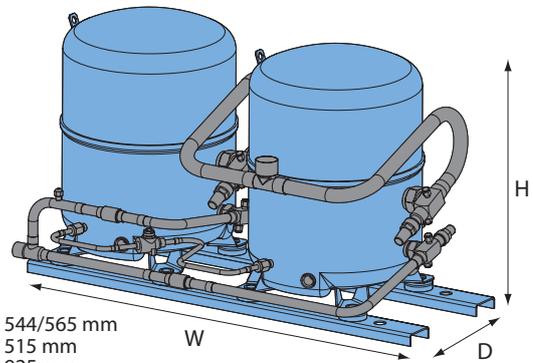
D : 288 mm
H : 413 mm
H1 : 265 mm
H2 : 74 mm

**MT / MTZ / NTZ
4 cylinders**



D : 352 mm
H : 519 / 540 mm
H1 : 233 mm
H2 : 125 mm

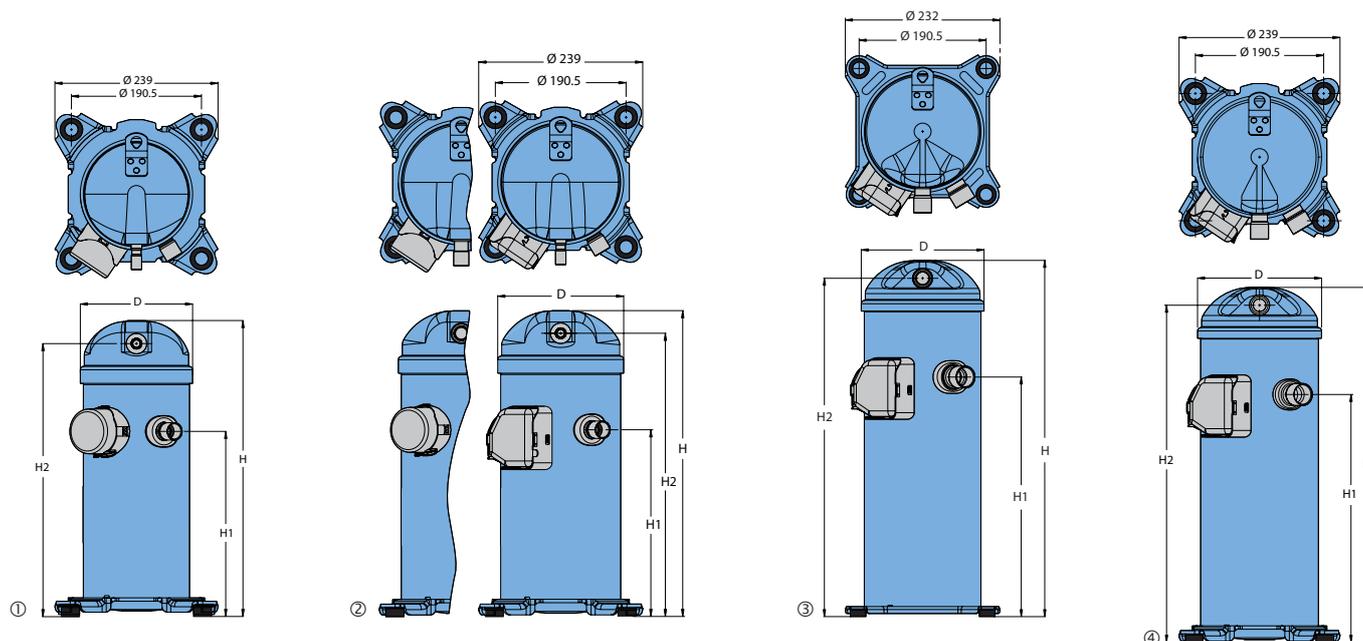
**MT / MTZ / NTZ Tandem
2 x 4 cylinders**



H : 544/565 mm
D : 515 mm
W : 925 mm

Scroll compressors – H series

Dimensions



Outline	R22	R407C	R410A	D	H	H1	H2
①	HRM032-034-038-040-042	HRP034-038-040-042	HRH029-031-032-034-036-038	165	413	250	379
①	HRM045-047	HRP045-047	HRH040	165	439	275	405
②	HRM048-051-054-058-060- HLM068-072-075-078-081	HRP048-051-054-058-060- HLP068-072-075-081	HRH041-044-049-051-054-056- HLH061-068-072-083	184	455	280	422
③	HCM094	HCP094		184	536	369	509
③	HCM109-120	HCP109-120		184	545	369	519
④			HCJ090-105-120	184	537	377	510

All dimensions in mm

Nomenclature

Type	Size	Motor	Features
HRH	036	U1L	P6

Application: _____
H: high temperature / air conditioning

Family: _____
C: light commercial scroll
R: residential scroll (new platform)
L: light commercial scroll (new platform)

Refrigerant & lubricant: _____
M: R22/R417A, alkylbenzene lubricant*
P: R407C, PVE lubricant
H: R410A, PVE lubricant
J: R410A, PVE lubricant

Nominal capacity: _____
In thousand Btu/h at 60 Hz,
ARI conditions

Model variation _____
T: design optimized for 7.2/54.4°C
U: design optimized for 7.2/37.8°C

Other features

	Oil sight glass	Oil equalisation	Oil drain	LP gauge port	Gas equalisation port
6	None	None	None	None	None
7	Threaded	None	None	None	None
8	None	Brazed	None	None	Brazed

Tubing and electrical connections
P: brazed connections, spade terminals
C: brazed connections, screw terminals

Motor protection
L: internal motor protection

Motor voltage code
1: 208-230 V/1~/60 Hz
2: 200-220 V/3~/50Hz & 208-230 V/3~/60 Hz
4: 380-400 V/3~/50 Hz & 460 V/3~/60 Hz
5: 220-240 V/1~/50 Hz
7: 500 V/3~/50 Hz & 575 V/ 3~/60 Hz
9: 380 V/3~/60 Hz

* When H*M compressors are used with R417A, the factory charged oil must be replaced by PVE oil 320HV (120Z5034)

Scroll compressors R407C • HRP/HLP/HCP

	Te	-25	-25	-20	-20	-15	-15	-10	-10	-5	-5	0	0	5	5	10	10
	Tc	Cooling (W)	Pe (kW)														
HRP025T4	35	1900	1.11	2400	1.15	3000	1.18	3700	1.21	4600	1.24	5500	1.26	6500	1.29	7600	1.32
	45	-	-	2100	1.38	2700	1.43	3400	1.47	4100	1.51	4900	1.53	5900	1.55	6900	1.57
	55	-	-	-	-	-	-	3000	1.76	3700	1.81	4400	1.85	5300	1.88	6200	1.89
HRP034T4	35	2500	1.73	3200	1.71	4100	1.70	5100	1.69	6300	1.68	7700	1.67	9300	1.64	11200	1.59
	45	-	-	2800	2.19	3500	2.18	4500	2.16	5600	2.15	6800	2.14	8300	2.12	10000	2.08
	55	-	-	-	-	-	-	3800	2.77	4800	2.76	5900	2.75	7200	2.73	8700	2.71
HRP038T4	35	2700	1.85	3500	1.83	4400	1.82	5500	1.82	6900	1.80	8400	1.79	10200	1.76	12200	1.71
	45	-	-	3100	2.32	3900	2.31	4900	2.30	6100	2.29	7500	2.27	9100	2.25	11000	2.21
	55	-	-	-	-	-	-	4200	2.91	5300	2.90	6600	2.89	8000	2.87	9700	2.84
HRP040T4	35	2900	2.03	3700	2.01	4700	2.00	5800	1.99	7200	1.97	8900	1.95	10700	1.92	12900	1.87
	45	-	-	3200	2.57	4100	2.55	5100	2.54	6400	2.52	7800	2.51	9500	2.48	11500	2.44
	55	-	-	-	-	-	-	4300	3.24	5500	3.23	6800	3.22	8300	3.20	10000	3.17
HRP042T4	35	3000	2.13	3900	2.11	4900	2.10	6100	2.09	7600	2.08	9300	2.06	11300	2.02	13600	1.97
	45	-	-	3300	2.70	4300	2.68	5400	2.67	6700	2.65	8300	2.64	10000	2.61	12100	2.56
	55	-	-	-	-	-	-	4600	3.41	5700	3.40	7100	3.38	8700	3.36	10500	3.33
HRP045T4	35	3300	2.19	4200	2.16	5300	2.15	6700	2.14	8300	2.13	10100	2.11	12300	2.07	14700	2.01
	45	-	-	3700	2.86	4700	2.83	6000	2.81	7400	2.80	9100	2.78	11100	2.75	13400	2.70
	55	-	-	-	-	-	-	5200	3.70	6500	3.69	8000	3.68	9800	3.66	11900	3.62
HRP047T4	35	3400	2.30	4400	2.28	5600	2.26	7000	2.25	8700	2.24	10600	2.22	12900	2.18	15500	2.12
	45	-	-	3900	2.97	4900	2.94	6200	2.93	7700	2.91	9500	2.89	11600	2.86	13900	2.81
	55	-	-	-	-	-	-	5300	3.81	6700	3.80	8300	3.78	10100	3.76	12300	3.73
HRP048T4	35	3500	2.39	4400	2.38	5600	2.37	7100	2.36	8800	2.35	10700	2.32	13000	2.28	15600	2.23
	45	-	-	3900	2.88	4900	2.87	6200	2.86	7800	2.85	9500	2.83	11600	2.80	14000	2.75
	55	-	-	-	-	-	-	5300	3.44	6700	3.44	8200	3.42	10100	3.40	12200	3.37
HRP051T4	35	3700	2.33	4800	2.36	6100	2.39	7600	2.42	9400	2.46	11500	2.50	14000	2.54	16800	2.60
	45	-	-	4200	3.18	5400	3.15	6800	3.13	8400	3.12	10300	3.11	12600	3.11	15100	3.12
	55	-	-	-	-	-	-	5800	4.00	7300	3.95	9000	3.91	11000	3.89	13400	3.87
HRP054T4	35	3900	2.44	5000	2.46	6400	2.50	8000	2.53	9800	2.57	12100	2.61	14600	2.66	17600	2.72
	45	-	-	4400	3.32	5600	3.29	7000	3.26	8700	3.25	10800	3.24	13100	3.24	15800	3.25
	55	-	-	-	-	-	-	6100	4.15	7600	4.10	9400	4.06	11400	4.03	13800	4.01
HRP058T4	35	4200	2.61	5400	2.64	6800	2.68	8500	2.71	10600	2.75	12900	2.80	15700	2.85	18800	2.91
	45	-	-	4700	3.56	6000	3.52	7500	3.50	9400	3.48	11500	3.47	14000	3.48	16900	3.49
	55	-	-	-	-	-	-	6500	4.45	8100	4.39	10000	4.35	12300	4.32	14800	4.30
HRP060T4	35	4300	2.71	5600	2.74	7000	2.78	8800	2.81	10900	2.85	13400	2.90	16200	2.95	19500	3.02
	45	-	-	4800	3.65	6200	3.61	7800	3.58	9700	3.55	11900	3.54	14500	3.54	17400	3.56
	55	-	-	-	-	-	-	6700	4.50	8400	4.42	10300	4.36	12600	4.32	15300	4.31
HLP068T4	35	5300	3.37	6800	3.42	8600	3.46	10800	3.50	13300	3.55	16300	3.60	19800	3.67	23900	3.77
	45	-	-	5800	4.50	7400	4.44	9200	4.38	11400	4.34	14000	4.32	17100	4.33	20600	4.36
	55	-	-	-	-	-	-	7800	5.43	9500	5.31	11700	5.22	14200	5.16	17300	5.15
HLP072T4	35	5600	3.57	7200	3.66	9100	3.71	11300	3.75	14000	3.78	17200	3.83	20800	3.89	25000	4.00
	45	-	-	6100	4.83	7800	4.73	9700	4.64	12000	4.58	14800	4.55	18000	4.57	21700	4.65
	55	-	-	-	-	-	-	8200	5.76	10100	5.56	12400	5.42	15100	5.35	18300	5.37
HLP075T4	35	5500	3.84	7100	3.81	9000	3.80	11300	3.78	14000	3.76	17200	3.72	20800	3.65	25000	3.56
	45	-	-	6300	4.69	8000	4.67	10100	4.65	12500	4.63	15400	4.60	18700	4.55	22500	4.47
	55	-	-	-	-	-	-	8600	5.70	10800	5.69	13400	5.67	16400	5.64	19900	5.58
HLP081T4	35	5700	4.16	7300	4.15	9300	4.13	11600	4.11	14400	4.07	17700	4.02	21400	3.95	25700	3.85
	45	-	-	6600	5.13	8400	5.10	10600	5.07	13200	5.03	16200	4.99	19700	4.92	23700	4.84
	55	-	-	-	-	-	-	9300	6.26	11700	6.21	14500	6.16	17800	6.10	21500	6.02
HCP094T4	35	6600	4.61	8500	4.59	10800	4.57	13500	4.55	16700	4.52	20400	4.47	24800	4.40	29800	4.29
	45	-	-	7500	5.63	9500	5.61	12000	5.58	14900	5.56	18300	5.52	22300	5.46	26900	5.37
	55	-	-	-	-	-	-	10300	6.83	13000	6.81	16000	6.78	19600	6.74	23800	6.68
HCP109T4	35	8100	4.80	10200	4.93	13000	5.02	16400	5.09	20300	5.15	24700	5.21	29500	5.26	34800	5.32
	45	-	-	9300	6.01	11500	6.19	14400	6.31	18000	6.39	22200	6.42	26900	6.43	32100	6.41
	55	-	-	-	-	-	-	12600	7.84	15600	7.98	19300	8.05	23700	8.06	28700	8.01
HCP120T4	35	9000	5.49	11300	5.64	14400	5.75	18100	5.81	22300	5.86	27200	5.91	32500	5.98	38400	6.07
	45	-	-	10300	6.85	12600	7.03	15800	7.14	19600	7.21	24200	7.24	29400	7.26	35200	7.28
	55	-	-	-	-	-	-	13700	8.82	16800	8.94	20800	8.99	25600	9.01	31000	8.99

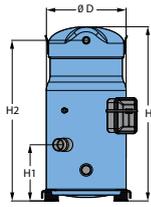
To: Evaporating temperature in °C
Tc: Condensing temperature in °C

Qo: Cooling capacity in W
Pe: Power input in kW

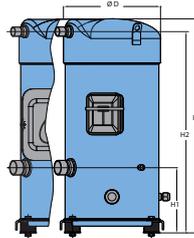
Superheat = 11.1 K
 Subcooling = 8.3 K

Voltage: 400 V / 3 / 50 Hz

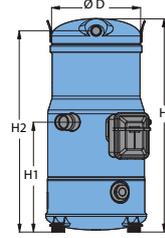
Product range single compressors – Air Conditioning Performer® scroll compressors S series



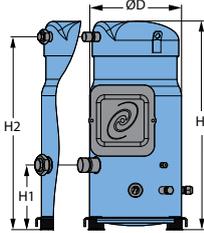
	D	H	H1	H2
S084-090-100	254	508	142	465
S110-120	254	558	178	515



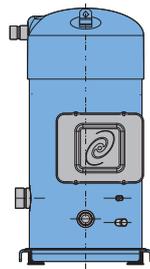
	D	H	H1	H2
S148-161	266	591	180	556



	D	H	H1	H2
S112	243	535	278	504
S124-147	243	540	278	509



	D	H	H1	H2
S115-125	254	581	180	537
S160	266	631	180	596
S175-185	316	678	180	641



	D	H	H1	H2
S240	344	727	196	654
S300	344	738	196	665
S380	344	762	196	689

All dimensions in mm

Model	Motor voltage code		
	400 V/3/50Hz - 460V/3/60Hz	230/3/50	500/3/50 - 575/3/60
	4	6	7
SM/SZ084-090-100-110-120	●	●	●
SM/SZ148-161	●	●	●
SM112-124-147	●		
SM/SZ115-125-160-175-185	○	○	○
SY185	○	●	
SY/SZ240-300	○	○	○
SY/SZ380 *	●		

○ Rotolock version ● Brazed version * SY380 only available for 400/3/50Hz

Family, lubricant & refrigerant	Nominal capacity	Voltage	Version	Evolution index	
SZ SY	185 300	- 4 7	R CA	C A	Single compressors Single compressors

Family, lubricant & refrigerant
SM: Scroll, Mineral oil, R22/R417A**
SY: Scroll, POE lubricant, R22/R417A (and R407C for SY185-240-300)
SZ: Scroll, POE lubricant, R407C - R134a (and R404A, R507A for SZ084 to SZ185)

Nominal capacity
 in thousand Btu/h at 60 Hz, R22, ARI conditions

Motor voltage code
3: 200-230V/3~/60 Hz
4: 380-400V/3~/50 - 460V/3~/60 Hz
6: 230V/3~/50 Hz
7: 500V/3~/50 Hz - 575V/3~/60 Hz
9: 380V/3~/60 Hz

Motor protection type	Connection	Module voltage	Applies to
Internal overload protector	V : brazed		S 084-090-100-110-120-148-161
	A : brazed		S 112-124-147
Internal thermostat	C : brazed		S 115-125-160-175-185
	R : rotolock		
Electronic protection module	P : brazed 24 V AC		
	X : brazed 230 V		
	S : rotolock 24 V AC		
	Y : rotolock 230 V		
	CA : C: brazed	A: 24V AC	S 240 - 300
	CB : P: rotolock	B: 115/230V	
	PA : C: brazed	A: 24V AC	S 380 *
	PB : P: rotolock	B: 115/230V	
	CA : C: brazed	A: 24V AC	
	CB : P: rotolock	B: 115/230V	

* SY380 only available for 400V/3~/50 Hz, SZ380 available for both 400V/3~/50 Hz and 460V/3~/60 Hz
 ** When SM compressors are used with R417A, the factory charged mineral oil 160P must be replaced by polyolester oil 160SZ

Scroll compressors SM / SY R22

Model	To	-20		-15		-10		-5		0		5		10		15	
	Tc	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe
SM084	35	7 700	4.0	9 900	4.0	12 500	4.0	15 500	4.0	18 900	4.0	22 800	4.0	27 200	3.9	32 100	3.9
	55	-	-	-	-	-	-	12 000	6.4	15 000	6.3	18 500	6.2	22 500	6.2	26 900	6.1
SM090	35	8 600	4.3	10 900	4.4	13 600	4.4	16 700	4.4	20 200	4.4	24 300	4.4	28 900	4.4	34 100	4.4
	55	-	-	-	-	-	-	13 300	6.7	16 400	6.7	19 900	6.6	23 900	6.6	28 400	6.5
SM100	35	9 000	4.6	11 500	4.6	14 400	4.7	17 700	4.7	21 500	4.7	25 800	4.7	30 700	4.7	36 200	4.7
	55	-	-	-	-	-	-	14 200	7.1	17 400	7.1	21 200	7.1	25 400	7.0	30 200	7.0
SM110	35	10 200	5.2	13 000	5.2	16 200	5.2	20 000	5.2	24 200	5.2	29 000	5.2	34 400	5.2	40 400	5.2
	55	-	-	-	-	-	-	15 900	8.0	19 600	8.0	23 800	7.9	28 400	7.9	33 700	7.8
SM112	35	11 300	5.1	14 100	5.1	17 400	5.2	21 200	5.3	25 500	5.4	30 500	5.5	36 100	5.6	42 500	5.7
	55	-	-	-	-	-	-	17 500	7.8	21 200	7.9	25 400	8.0	30 200	8.1	35 700	8.2
SM115	35	11 200	5.4	13 900	5.4	17 100	5.4	20 800	5.5	25 100	5.5	30 000	5.4	35 600	5.4	41 800	5.4
	55	-	-	-	-	-	-	16 500	8.6	20 700	8.5	25 500	8.5	31 000	8.4	37 100	8.3
SM120	35	11 800	6.0	15 200	6.0	19 000	6.0	23 300	5.9	28 200	5.9	33 700	5.9	39 900	5.9	46 700	5.9
	55	-	-	-	-	-	-	18 600	9.2	22 800	9.2	27 600	9.1	33 000	9.0	38 900	9.0
SM124	35	13 100	5.4	16 200	5.5	19 800	5.7	23 900	5.8	28 700	6.0	34 100	6.1	40 300	6.2	47 200	6.4
	55	-	-	-	-	-	-	19 800	8.4	24 000	8.6	28 700	8.8	34 100	9.0	40 200	9.2
SM125	35	12 000	5.8	15 000	5.8	18 400	5.9	22 400	5.9	27 000	5.9	32 300	5.9	38 200	5.8	45 000	5.8
	55	-	-	-	-	-	-	17 700	9.3	22 300	9.2	27 400	9.1	33 300	9.0	39 900	8.9
SM147	35	14 900	6.3	18 600	6.4	22 900	6.5	27 800	6.7	33 500	6.9	40 000	7.1	47 300	7.2	55 600	7.4
	55	-	-	-	-	-	-	22 700	9.8	27 500	9.9	33 100	10.1	39 400	10.3	46 600	10.5
SM148	35	14 800	7.0	18 500	7.0	22 900	7.1	27 800	7.1	33 600	7.2	40 100	7.2	47 500	7.3	55 900	7.3
	55	-	-	-	-	-	-	22 600	10.9	27 500	10.9	33 100	10.9	39 500	11.0	46 800	11.0
SM160	35	15 500	7.6	19 600	7.7	24 300	7.8	29 700	7.9	35 900	8.0	43 000	8.1	50 900	8.1	59 800	8.2
	55	-	-	-	-	-	-	11.5	24 100	11.6	29 600	11.6	35 800	11.7	42 900	11.8	50 800
SM161	35	16 000	7.5	20 100	7.6	24 700	7.6	30 100	7.6	36 300	7.7	43 400	7.7	51 400	7.8	60 500	7.8
	55	-	-	-	-	-	-	24 400	11.7	29 700	11.7	35 800	11.7	42 800	11.8	50 600	11.8
SM175	35	17 000	8.1	21 300	8.1	26 400	8.2	32 300	8.3	39 000	8.4	46 600	8.4	55 200	8.5	64 800	8.5
	55	-	-	-	-	-	-	26 200	12.4	32 000	12.5	38 500	12.6	46 000	12.6	54 400	12.7
SM185	35	18 400	8.8	23 100	8.9	28 600	9.0	35 000	9.1	42 200	9.1	50 500	9.2	59 800	9.3	70 200	9.3
	55	-	-	-	-	-	-	13.5	28 400	13.6	34 600	13.7	41 800	13.8	49 800	13.8	58 900
SY185	35	17 600	8.7	22 500	8.7	28 100	8.7	34 500	8.8	42 000	8.9	50 400	9.0	60 000	9.1	70 900	9.2
	55	-	-	-	-	-	-	13.3	28 600	13.3	34 800	13.3	41 900	13.4	49 800	13.5	58 600
SY240	35	25 100	11.7	31 400	11.8	38 800	12.0	47 300	12.1	57 100	12.4	68 300	12.6	81 000	13.0	95 300	13.3
	55	-	-	-	-	-	-	38 400	17.8	46 600	18.0	56 100	18.3	67 000	18.6	79 300	18.9
SY300	35	31 900	14.2	39 900	14.5	49 300	14.8	60 300	15.1	73 100	15.6	87 900	16.1	104 800	16.7	124 100	17.4
	55	-	-	-	-	-	-	48 600	22.0	59 200	22.4	71 600	22.8	85 900	23.4	102 300	24.1
SY380	35	40 100	17.3	49 500	17.6	60 500	18.0	73 300	18.4	88 100	18.8	104 900	19.2	124 100	19.8	145 800	20.4
	55	-	-	-	-	-	-	59 700	26.8	72 300	27.1	86 800	27.5	103 400	27.9	122 300	28.4
SM170	35	15 200	8.0	19 500	8.0	24 600	8.0	30 500	8.0	37 200	8.0	44 900	7.9	53 500	7.9	63 200	7.8
	55	-	-	-	-	-	-	23 600	12.7	29 600	12.6	36 500	12.5	44 300	12.3	53 100	12.1
SM180	35	16 900	8.6	21 400	8.7	26 700	8.8	32 800	8.8	39 900	8.8	47 900	8.8	56 900	8.8	67 100	8.7
	55	-	-	-	-	-	-	26 200	13.4	32 300	13.3	39 300	13.3	47 100	13.2	56 000	13.1
SM200	35	17 700	9.2	22 600	9.3	28 300	9.3	34 800	9.3	42 300	9.4	50 900	9.4	60 500	9.4	71 300	9.4
	55	-	-	-	-	-	-	27 900	14.3	34 400	14.2	41 700	14.1	50 000	14.0	59 400	13.9
SM220	35	20 000	10.4	25 500	10.4	32 000	10.4	39 300	10.4	47 700	10.5	57 100	10.5	67 700	10.4	79 500	10.4
	55	-	-	-	-	-	-	31 400	16.0	38 600	16.0	46 800	15.9	56 000	15.8	66 300	15.6
SM230	35	22 000	10.8	27 400	10.9	33 700	10.9	41 000	10.9	49 500	10.9	59 100	10.9	70 100	10.9	82 400	10.8
	55	-	-	-	-	-	-	32 500	17.2	40 800	17.1	50 200	16.9	61 000	16.7	73 100	16.5
SM242	35	23 300	12.0	29 900	11.9	37 400	11.9	45 900	11.9	55 600	11.9	66 400	11.9	78 500	11.8	92 000	11.8
	55	-	-	-	-	-	-	36 600	18.4	45 000	18.3	54 400	18.2	64 900	18.1	76 600	17.9
SM248	35	26 300	10.9	32 500	11.1	39 600	11.3	47 900	11.6	57 400	11.9	68 200	12.2	80 500	12.5	94 400	12.7
	55	-	-	-	-	-	-	39 700	16.9	47 900	17.2	57 400	17.5	68 100	17.9	80 300	18.4
SM250	35	23 700	11.6	29 500	11.7	36 200	11.7	44 100	11.7	53 200	11.7	63 500	11.7	75 300	11.7	88 600	11.6
	55	-	-	-	-	-	-	35 000	18.5	43 800	18.4	54 000	18.2	65 600	18.0	78 600	17.7
SM268	35	26 600	13.0	33 700	13.0	41 800	13.0	51 100	13.1	61 700	13.1	73 700	13.2	87 300	13.2	102 400	13.2
	55	-	-	-	-	-	-	40 700	20.1	49 800	20.1	60 100	20.0	71 700	20.0	84 800	20.0
SM271	35	25 800	12.7	32 500	12.8	40 300	12.8	49 300	12.9	59 600	12.9	71 300	13.0	84 500	13.0	99 300	13.0
	55	-	-	-	-	-	-	39 700	19.7	48 600	19.7	58 700	19.7	70 100	19.6	83 000	19.6
SM272	35	28 000	11.7	34 800	11.9	42 600	12.2	51 700	12.5	62 100	12.8	73 900	13.2	87 400	13.5	102 600	13.8
	55	-	-	-	-	-	-	41 700	18.3	50 500	18.5	60 600	18.9	72 100	19.3	85 200	19.7
SM281	35	27 500	13.5	34 700	13.5	43 000	13.6	52 600	13.6	63 600	13.6	75 900	13.7	89 900	13.7	105 500	13.7
	55	-	-	-	-	-	-	42 300	20.9	51 800	20.9	62 500	20.8	74 600	20.8	88 200	20.8
SM285	35	27 100	13.4	34 000	13.5	42 100	13.6	51 400	13.7	62 000	13.8	74 100	13.9	87 800	14.0	103 200	14.1
	55	-	-	-	-	-	-	41 200	20.8	51 100	20.8	62 300	20.8	75 000	20.8	89 300	20.7
SM290	35	27 700	13.5	34 700	13.6	42 900	13.7	52 300	13.8	63 100	13.8	75 400	13.9	89 400	13.9	105 100	13.9
	55	-	-	-	-	-	-	42 000	21.0	51 900	21.1	63 100	21.1	75 800	21.0	90 100	20.9
SM294	35	29 900	12.5	37 200	12.7	45 800	13.0	55 600	13.4	67 000	13.7	79 900	14.1	94 600	14.5	111 200	14.8
	55	-	-	-	-	-	-	45 400	19.7	55 100	19.9	66 200	20.2	78 900	20.6	93 300	21.1
SM296	35	29 200	14.0	36 500	14.1	45 000	14.2	54 800	14.2	66 100	14.3	79 000	14.4	93 600	14.5	110 100	14.6
	55	-	-	-	-	-	-	44 500	21.8	54 100	21.8	65 200	21.8	77 900	21.9	92 200	21.9
SM310	35	30 000	14.6	37 500	14.7	46 300	14.8	56 500	14.9	68 200	15.0	81 500	15.1	96 500	15.1	113 500	15.1
	55	-	-	-	-	-	-	45 400	22.8	56 000	22.9	68 100	22.9	81 900	22.8	97 300	22.7
SM320	35	30 600	15.2	38 600	15.4	47 900	15.6	58 600	15.7	70 800	15.9	84 700	16.1	100 300	16.3	117 900	16.5
	55	-	-	-	-	-	-	47 400	23.1	58 300	23.3	70 600	23.4	84 500	23.5	100 100	23.7
SM322	35	31 600	15.0	39 500	15.1	48 700	15.2	59 300	15.3	71 500	15.4	85 500	15.5				

Scroll compressors SZ R134a

Model	To	-15		-10		-5		0		5		10		15	
	Tc	Qo	Pe	Qo	Pe										
SZ084	35	6 200	2.8	8 000	2.8	10 100	2.8	12 600	2.8	15 400	2.7	18 700	2.7	22 400	2.6
	55	-	-	6 100	4.3	7 900	4.3	9 900	4.3	12 400	4.3	15 100	4.3	18 300	4.2
SZ090	35	6 700	2.9	8 600	2.9	10 900	3.0	13 400	2.9	16 400	2.9	19 800	2.9	23 600	2.8
	55	-	-	6 600	4.5	8 500	4.6	10 700	4.6	13 200	4.6	16 000	4.5	19 300	4.5
SZ100	35	7 300	3.1	9 400	3.1	11 700	3.1	14 400	3.1	17 500	3.1	21 000	3.1	25 000	3.1
	55	-	-	7 300	4.8	9 300	4.8	11 500	4.9	14 100	4.9	17 100	4.9	20 400	4.8
SZ110	35	8 200	3.5	10 500	3.5	13 200	3.5	16 200	3.5	19 800	3.5	23 800	3.5	28 400	3.5
	55	-	-	8 100	5.4	10 400	5.4	13 000	5.5	16 000	5.5	19 400	5.5	23 300	5.4
SZ115	35	9 000	3.8	11 600	3.8	14 500	3.8	17 900	3.8	21 800	3.8	26 300	3.7	31 200	3.7
	55	-	-	8 900	5.9	11 400	5.9	14 300	5.9	17 600	5.9	21 400	5.9	25 700	5.9
SZ120	35	9 400	4.0	12 000	4.0	15 100	4.1	18 700	4.1	22 800	4.1	27 500	4.1	32 900	4.0
	55	-	-	9 300	6.2	11 900	6.3	14 900	6.3	18 400	6.3	22 400	6.3	27 000	6.2
SZ125	35	9 600	4.1	12 300	4.1	15 500	4.1	19 100	4.1	23 300	4.0	28 000	4.0	33 300	3.9
	55	-	-	9 500	6.3	12 100	6.3	15 200	6.3	18 800	6.3	22 800	6.3	27 400	6.2
SZ148	35	11 200	5.0	14 400	5.0	18 100	5.0	22 600	5.0	27 900	5.0	34 000	5.0	41 100	5.0
	55	-	-	11 200	7.7	14 200	7.7	17 800	7.7	22 100	7.7	27 100	7.8	32 800	7.8
SZ160	35	12 400	5.3	15 900	5.3	20 000	5.4	24 700	5.4	30 200	5.4	36 400	5.4	43 500	5.4
	55	-	-	12 300	7.9	15 800	8.0	19 800	8.0	24 500	8.1	29 800	8.1	35 900	8.1
SZ161	35	12 000	5.2	15 300	5.2	19 200	5.3	23 800	5.3	29 200	5.4	35 500	5.4	42 700	5.4
	55	-	-	12 100	8.0	15 300	8.0	19 200	8.1	23 700	8.1	28 900	8.1	35 000	8.1
SZ175	35	13 200	5.7	16 900	5.8	21 200	5.8	26 200	5.9	32 100	5.9	38 700	5.9	46 200	5.8
	55	-	-	13 100	8.6	16 700	8.6	21 000	8.7	26 000	8.7	31 700	8.8	38 100	8.8
SZ185	35	14 000	6.1	18 000	6.1	22 600	6.2	27 900	6.2	34 100	6.3	41 200	6.3	49 200	6.2
	55	-	-	13 900	9.1	17 800	9.2	22 400	9.3	27 700	9.3	33 700	9.3	40 600	9.3
SZ240	35	18 900	8.4	23 900	8.5	29 900	8.6	37 100	8.7	45 700	8.7	56 000	8.8	68 200	8.9
	55	-	-	18 800	12.3	23 800	12.5	29 700	12.6	36 700	12.7	45 000	12.9	54 700	13.0
SZ300	35	23 700	10.2	30 000	10.4	37 500	10.5	46 300	10.6	56 700	10.7	68 900	10.8	82 800	11.0
	55	-	-	23 600	15.2	29 700	15.4	37 100	15.6	45 800	15.9	55 900	16.1	67 800	16.4
SZ380	35	30 200	12.3	38 000	12.5	47 300	12.7	58 200	12.9	71 000	13.1	85 800	13.4	102 900	13.6
	55	-	-	30 100	18.1	37 800	18.4	46 900	18.7	57 600	19.0	70 000	19.2	84 400	19.4
SZ170	35	12 200	5.5	15 700	5.6	19 900	5.6	24 800	5.5	30 400	5.5	36 800	5.4	44 000	5.3
	55	-	-	11 900	8.6	15 500	8.6	19 600	8.6	24 300	8.6	29 800	8.5	36 000	8.4
SZ180	35	13 300	5.9	17 000	5.9	21 400	5.9	26 500	5.9	32 300	5.8	39 000	5.8	46 500	5.7
	55	-	-	13 100	9.1	16 800	9.1	21 100	9.1	26 000	9.1	31 600	9.1	38 000	9.0
SZ200	35	14 500	6.2	18 400	6.2	23 000	6.3	28 400	6.3	34 500	6.2	41 400	6.2	49 200	6.1
	55	-	-	14 400	9.6	18 200	9.7	22 700	9.7	27 800	9.7	33 600	9.7	40 200	9.7
SZ220	35	16 300	7.0	20 700	7.0	25 900	7.1	32 000	7.1	39 000	7.1	46 900	7.0	56 000	6.9
	55	-	-	16 100	10.8	20 500	10.9	25 600	10.9	31 400	10.9	38 200	10.9	45 900	10.9
SZ230	35	17 800	7.6	22 800	7.6	28 600	7.6	35 300	7.6	43 000	7.6	51 700	7.5	61 600	7.4
	55	-	-	17 500	11.7	22 500	11.8	28 200	11.8	34 800	11.8	42 200	11.8	50 700	11.7
SZ242	35	18 600	8.0	23 700	8.1	29 700	8.1	36 800	8.1	44 900	8.1	54 200	8.1	64 900	8.0
	55	-	-	18 300	12.5	23 400	12.5	29 300	12.5	36 200	12.5	44 200	12.5	53 300	12.4
SZ250	35	19 000	8.1	24 300	8.1	30 500	8.1	37 600	8.1	45 800	8.1	55 100	8.0	65 600	7.9
	55	-	-	18 600	12.5	23 900	12.5	30 000	12.6	37 000	12.6	45 000	12.5	54 000	12.5
SZ268	35	20 600	9.0	26 400	9.1	33 200	9.1	41 200	9.1	50 600	9.1	61 400	9.1	73 900	9.0
	55	-	-	20 100	13.9	25 700	14.0	32 300	14.0	39 900	14.0	48 800	14.0	59 100	14.0
SZ271	35	20 200	8.7	25 800	8.7	32 300	8.8	40 000	8.9	48 900	8.9	59 200	8.9	71 000	8.9
	55	-	-	19 900	13.4	25 300	13.5	31 600	13.5	39 000	13.6	47 600	13.6	57 400	13.6
SZ281	35	21 400	9.2	27 300	9.3	34 300	9.3	42 400	9.4	51 900	9.4	62 900	9.4	75 500	9.4
	55	-	-	21 000	14.2	26 800	14.3	33 500	14.3	41 500	14.4	50 600	14.4	61 200	14.3
SZ285	35	21 700	9.3	27 800	9.4	34 900	9.4	43 100	9.5	52 600	9.5	63 400	9.4	75 600	9.3
	55	-	-	21 400	14.2	27 500	14.2	34 500	14.3	42 600	14.4	51 900	14.4	62 400	14.3
SZ290	35	21 900	9.5	28 000	9.6	35 200	9.6	43 500	9.7	53 100	9.7	64 000	9.6	76 300	9.5
	55	-	-	21 600	14.4	27 700	14.5	34 800	14.6	43 000	14.6	52 300	14.7	62 900	14.6
SZ296	35	22 100	10.0	28 300	10.0	35 700	10.0	44 500	10.0	54 900	10.0	67 000	10.0	80 900	10.0
	55	-	-	22 000	15.4	28 000	15.4	35 200	15.4	43 500	15.5	53 300	15.5	64 700	15.6
SZ310	35	23 300	10.1	29 800	10.2	37 500	10.3	46 300	10.3	56 500	10.3	68 100	10.2	81 200	10.1
	55	-	-	23 000	15.4	29 500	15.5	37 100	15.5	45 800	15.6	55 700	15.6	67 000	15.6
SZ320	35	24 400	10.5	31 300	10.6	39 300	10.7	48 700	10.8	59 400	10.8	71 700	10.8	85 700	10.8
	55	-	-	24 200	15.8	31 000	15.9	39 000	16.0	48 200	16.1	58 700	16.2	70 700	16.2
SZ322	35	23 600	10.4	30 100	10.5	37 800	10.5	46 900	10.6	57 600	10.7	69 900	10.8	84 100	10.8
	55	-	-	23 800	15.9	30 200	16.0	37 800	16.1	46 600	16.2	56 900	16.2	68 900	16.2
SZ350	35	26 000	11.4	33 200	11.5	41 800	11.6	51 700	11.7	63 100	11.8	76 200	11.7	91 100	11.7
	55	-	-	25 700	17.1	33 000	17.3	41 400	17.4	51 200	17.5	62 400	17.5	75 100	17.5
SZ370	35	27 600	12.1	35 400	12.3	44 500	12.4	55 000	12.5	67 200	12.5	81 100	12.5	96 900	12.4
	55	-	-	27 400	18.2	35 100	18.4	44 100	18.5	54 500	18.6	66 400	18.7	79 900	18.6

To: Evaporating temperature in °C
Tc: Condensing temperature in °C

Qo: Cooling capacity in W
Pe: Power input in kW

Superheat = 11.1 K
Subcooling = 8.3 K

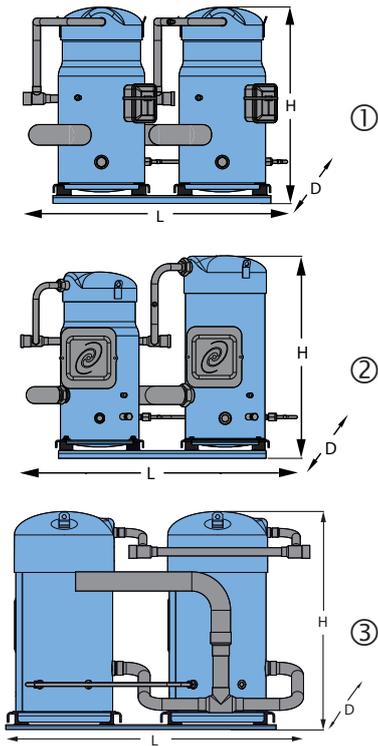
Voltage: 400 V / 3 / 50 Hz

Scroll compressors SZ R407C

Model	To	-20		-15		-10		-5		0		5		10		15	
	Tc	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe								
SZ084	35	7 200	3.9	9 300	3.9	11 800	4.0	14 800	4.0	18 300	4.0	22 300	4.0	27 000	4.0	32 300	3.9
	55	-	-	-	-	-	-	11 300	6.2	14 200	6.2	17 500	6.2	21 400	6.2	25 800	6.2
SZ090	35	7 600	4.1	9 800	4.1	12 500	4.2	15 600	4.2	19 300	4.2	23 600	4.2	28 500	4.2	34 100	4.1
	55	-	-	-	-	-	-	12 000	6.5	15 000	6.5	18 500	6.5	22 500	6.5	27 200	6.5
SZ100	35	8 100	4.3	10 500	4.4	13 300	4.4	16 600	4.4	20 500	4.5	25 000	4.4	30 100	4.4	36 000	4.4
	55	-	-	-	-	-	-	12 700	6.9	15 900	6.9	19 600	6.9	23 800	6.9	28 700	6.9
SZ110	35	9 300	4.9	12 000	5.0	15 200	5.0	19 000	5.0	23 400	5.0	28 500	5.0	34 300	5.0	40 900	4.9
	55	-	-	-	-	-	-	14 500	7.9	18 100	7.9	22 300	7.9	27 200	7.8	32 700	7.8
SZ115	35	10 100	5.4	13 100	5.4	16 600	5.4	20 800	5.5	25 600	5.4	31 100	5.4	37 400	5.4	44 500	5.3
	55	-	-	-	-	-	-	15 800	8.7	19 800	8.7	24 400	8.6	29 600	8.6	35 600	8.5
SZ120	35	11 000	5.7	14 200	5.7	17 900	5.8	22 200	5.8	27 300	5.8	33 200	5.8	39 900	5.7	47 600	5.6
	55	-	-	-	-	-	-	17 000	9.2	21 200	9.2	26 100	9.2	31 600	9.1	38 000	9.0
SZ125	35	10 800	5.7	14 000	5.7	17 700	5.7	22 100	5.7	27 200	5.7	33 100	5.7	39 800	5.7	47 400	5.6
	55	-	-	-	-	-	-	16 800	9.2	21 000	9.1	25 900	9.1	31 500	9.0	37 900	9.0
SZ148	35	13 500	6.9	17 300	7.0	21 700	7.0	27 000	7.0	33 100	7.1	40 300	7.1	48 500	7.1	57 800	7.2
	55	-	-	-	-	-	-	21 200	11.1	26 200	11.1	32 100	11.1	38 900	11.1	46 700	11.1
SZ160	35	14 800	7.3	19 000	7.4	23 900	7.5	29 700	7.6	36 400	7.6	44 300	7.6	53 300	7.6	63 600	7.6
	55	-	-	-	-	-	-	23 200	11.8	28 800	11.9	35 200	11.9	42 700	11.9	51 400	11.9
SZ161	35	14 600	7.4	18 700	7.5	23 500	7.5	29 200	7.6	35 800	7.6	43 500	7.6	52 400	7.7	62 600	7.8
	55	-	-	-	-	-	-	22 900	12.0	28 400	12.0	34 700	12.0	42 100	12.0	50 600	12.0
SZ175	35	15 500	8.0	19 800	8.0	25 000	8.1	31 100	8.2	38 100	8.2	46 300	8.2	55 600	8.2	66 200	8.2
	55	-	-	-	-	-	-	24 000	12.7	29 800	12.8	36 500	12.8	44 200	12.8	53 000	12.8
SZ185	35	16 600	8.6	21 300	8.6	26 900	8.7	33 400	8.8	41 000	8.8	49 700	8.8	59 700	8.8	71 100	8.8
	55	-	-	-	-	-	-	25 700	13.7	32 000	13.7	39 200	13.8	47 500	13.8	56 900	13.8
SZ240	35	22 400	11.7	28 900	11.8	36 500	11.9	45 400	12.1	55 900	12.2	68 000	12.4	82 000	12.5	98 000	12.6
	55	-	-	21 900	17.9	28 100	18.0	35 500	18.2	44 000	18.4	54 000	18.7	65 500	18.9	78 800	19.2
SZ300	35	28 700	13.7	36 200	13.9	45 100	14.1	55 500	14.3	67 600	14.5	81 700	14.7	98 000	14.9	116 600	15.2
	55	-	-	28 500	21.2	35 900	21.6	44 600	22.1	54 800	22.5	66 600	22.9	80 400	23.2	96 300	23.6
SZ380	35	36 000	16.9	45 300	17.3	56 400	17.6	69 400	18.0	84 600	18.3	102 200	18.6	122 400	18.9	145 400	19.4
	55	-	-	35 000	26.1	44 200	26.6	55 000	27.0	67 500	27.4	82 100	27.8	98 900	28.1	118 200	28.5
SZ170	35	14 200	7.8	18 300	7.9	23 200	8.0	29 100	8.0	36 000	8.0	44 000	8.0	53 200	8.0	63 700	7.9
	55	-	-	-	-	-	-	22 300	12.3	27 900	12.4	34 500	12.4	42 100	12.4	50 900	12.4
SZ180	35	15 000	8.2	19 400	8.3	24 600	8.3	30 800	8.4	38 000	8.4	46 400	8.4	56 100	8.3	67 100	8.2
	55	-	-	-	-	-	-	23 600	13.0	29 500	13.0	36 400	13.1	44 400	13.0	53 600	13.0
SZ200	35	16 000	8.7	20 600	8.8	26 100	8.8	32 700	8.9	40 300	8.9	49 200	8.9	59 300	8.8	70 900	8.7
	55	-	-	-	-	-	-	25 000	13.8	31 300	13.9	38 600	13.9	47 000	13.8	56 600	13.8
SZ220	35	18 400	9.9	23 700	9.9	30 000	10.0	37 400	10.1	46 100	10.1	56 100	10.0	67 500	10.0	80 600	9.8
	55	-	-	-	-	-	-	28 600	15.8	35 800	15.8	44 000	15.8	53 500	15.7	64 400	15.5
SZ230	35	20 000	10.8	25 800	10.8	32 800	10.9	40 900	10.9	50 400	10.9	61 200	10.9	73 700	10.8	87 700	10.7
	55	-	-	-	-	-	-	31 100	17.4	38 900	17.3	48 000	17.3	58 400	17.2	70 200	17.0
SZ242	35	21 600	11.4	27 900	11.5	35 200	11.6	43 800	11.6	53 800	11.6	65 400	11.5	78 600	11.4	93 700	11.2
	55	-	-	-	-	-	-	33 600	18.3	41 800	18.4	51 300	18.3	62 300	18.1	74 800	17.9
SZ250	35	21 200	11.4	27 500	11.4	34 900	11.5	43 500	11.5	53 600	11.5	65 200	11.4	78 300	11.4	93 300	11.3
	55	-	-	-	-	-	-	33 100	18.3	41 400	18.3	51 100	18.2	62 100	18.1	74 700	17.9
SZ268	35	24 100	12.6	31 000	12.7	39 000	12.8	48 500	12.9	59 500	12.9	72 300	12.9	87 000	12.9	103 800	12.8
	55	-	-	-	-	-	-	37 600	20.3	46 700	20.3	57 300	20.3	69 400	20.2	83 400	20.1
SZ271	35	23 900	12.4	30 600	12.5	38 700	12.6	48 100	12.6	59 100	12.6	71 900	12.7	86 600	12.7	103 400	12.7
	55	-	-	-	-	-	-	36 700	19.9	45 700	19.9	56 000	19.9	68 000	19.9	81 800	19.8
SZ281	35	25 200	13.1	32 300	13.2	40 800	13.3	50 700	13.4	62 200	13.4	75 600	13.4	90 900	13.4	108 500	13.4
	55	-	-	-	-	-	-	39 300	21.2	48 800	21.2	59 900	21.2	72 600	21.1	87 200	21.0
SZ285	35	25 500	13.0	32 900	13.2	41 500	13.3	51 700	13.3	63 500	13.3	77 200	13.3	92 900	13.3	110 800	13.2
	55	-	-	-	-	-	-	39 300	21.0	48 900	21.0	60 100	21.0	73 100	21.0	87 900	20.9
SZ290	35	25 200	13.4	32 500	13.5	41 000	13.5	51 100	13.6	62 800	13.7	76 200	13.7	91 600	13.6	109 000	13.5
	55	-	-	-	-	-	-	39 100	21.4	48 800	21.5	59 900	21.5	72 700	21.4	87 300	21.3
SZ296	35	26 600	13.8	34 000	13.9	42 800	14.0	53 200	14.1	65 300	14.2	79 300	14.2	95 500	14.3	114 000	14.4
	55	-	-	-	-	-	-	41 700	22.2	51 700	22.3	63 200	22.3	76 600	22.3	92 000	22.3
SZ310	35	27 000	14.2	34 700	14.4	43 900	14.5	54 700	14.5	67 200	14.6	81 600	14.6	98 000	14.5	116 700	14.4
	55	-	-	-	-	-	-	41 900	22.9	52 200	22.9	64 100	22.9	77 800	22.9	93 400	22.8
SZ320	35	29 200	14.7	37 300	14.9	47 000	15.0	58 400	15.1	71 800	15.2	87 200	15.2	105 000	15.2	125 400	15.2
	55	-	-	-	-	-	-	45 700	23.6	56 700	23.7	69 400	23.8	84 200	23.8	101 300	23.9
SZ322	35	28 700	14.9	36 800	15.0	46 300	15.1	57 500	15.1	70 600	15.2	85 800	15.3	103 300	15.4	123 300	15.5
	55	-	-	-	-	-	-	45 100	23.9	55 900	24.0	68 400	24.0	82 900	24.0	99 600	24.0
SZ350	35	30 500	15.9	39 100	16.1	49 300	16.2	61 200	16.3	75 200	16.4	91 200	16.4	109 500	16.4	130 300	16.4
	55	-	-	-	-	-	-	47 200	25.4	58 600	25.6	71 900	25.6	87 100	25.7	104 400	25.7
SZ370	35	32 700	17.1	42 000	17.3	52 900	17.4	65 800	17.5	80 700	17.6	98 000	17.7	117 700	17.7	140 000	17.6
	55	-	-	-	-	-	-	50 700	27.4	63 000	27.5	77 200	27.6	93 500	27.6	112 100	27.6

To: Evaporating temperature in °C
Tc: Condensing temperature in °C

Scroll compressors – tandem

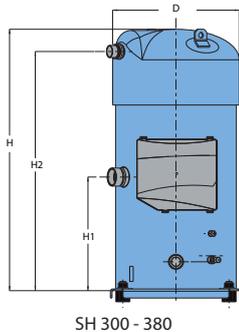
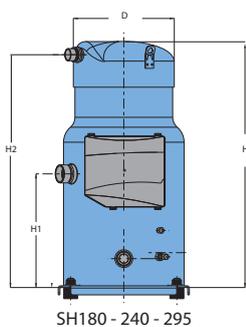
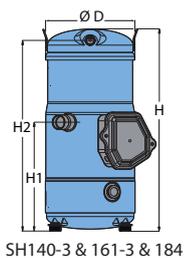
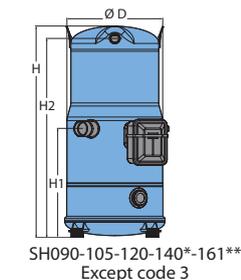


Outline n°	Model	Composition	Voltage code			Dimensions (mm)		
			4	6	7	L	D	H
			400/3/50 460/3/60	230/3/50	500/3/50 575/3/60			
①	SM/SZ170	S084 + S084	●	●	●	757	432	532
	SM/SZ180	S090 + S090	●	●	●	757	432	532
	SM/SZ200	S100 + S100	●	●	●	757	432	532
	SM/SZ220	S110 + S110	●	●	●	777	443	582
	SM/SZ230	S115 + S115	●	●	●	836	480	603
	SM/SZ242	S120 + S120	●	●	●	777	443	582
	SM248	S124 + S124	○			844	445	564
	SM/SZ250	S125 + S125	●	●	●	836	480	603
	SM272	S124 + S147	○			844	445	564
	SM294	S147 + S147	○			844	445	564
	SM/SZ296	S148 + S148	●	●	●	924	438	614
	SM/SZ320	S160 + S160	●	●	●	911	480	657
	SM/SZ322	S161 + S161	●	●	●	924	438	614
	SM/SZ350	S175 + S175	●	●	●	1004	495	717
②	SM/SZ370	S185 + S185	●	●	●	1004	495	717
	SM/SZ268	S148 + S120	●	●	●	930	441	614
	SM/SZ271	S161 + S110	●	●	●	930	441	614
	SM/SZ281	S161 + S120	●	●	●	930	441	614
	SM/SZ285	S160 + S125	●	●	●	884	480	657
	SM/SZ290	S175 + S115	●	●	●	924	496	705
	SM/SZ310	S185 + S125	●	●	●	924	496	705
	SY/SZ425	S240 + S185	○	○	○	1029	552	729
	SY/SZ485	S300 + S185	○	○	○	1029	552	740
	SY/SZ482	S240 + S240	○	○	○	984	510	730
③	SY/SZ540	S300 + S240	○	○	○	984	510	740
	SY/SZ600	S300 + S300	○	○	○	984	510	740
	SY/SZ620	S240 + S380	○			1058	595	770
	SY/SZ680	S300 + S380	○			1058	595	770
	SY/SZ760	S380 + S380	○			1063	595	770

● Factory built tandems

○ Tandems to be achieved by assembly of individual compressors. Specific outline drawings of tandems, trio and quadro units are available, refer to FRCC.PC.005.

Scroll compressors – SH

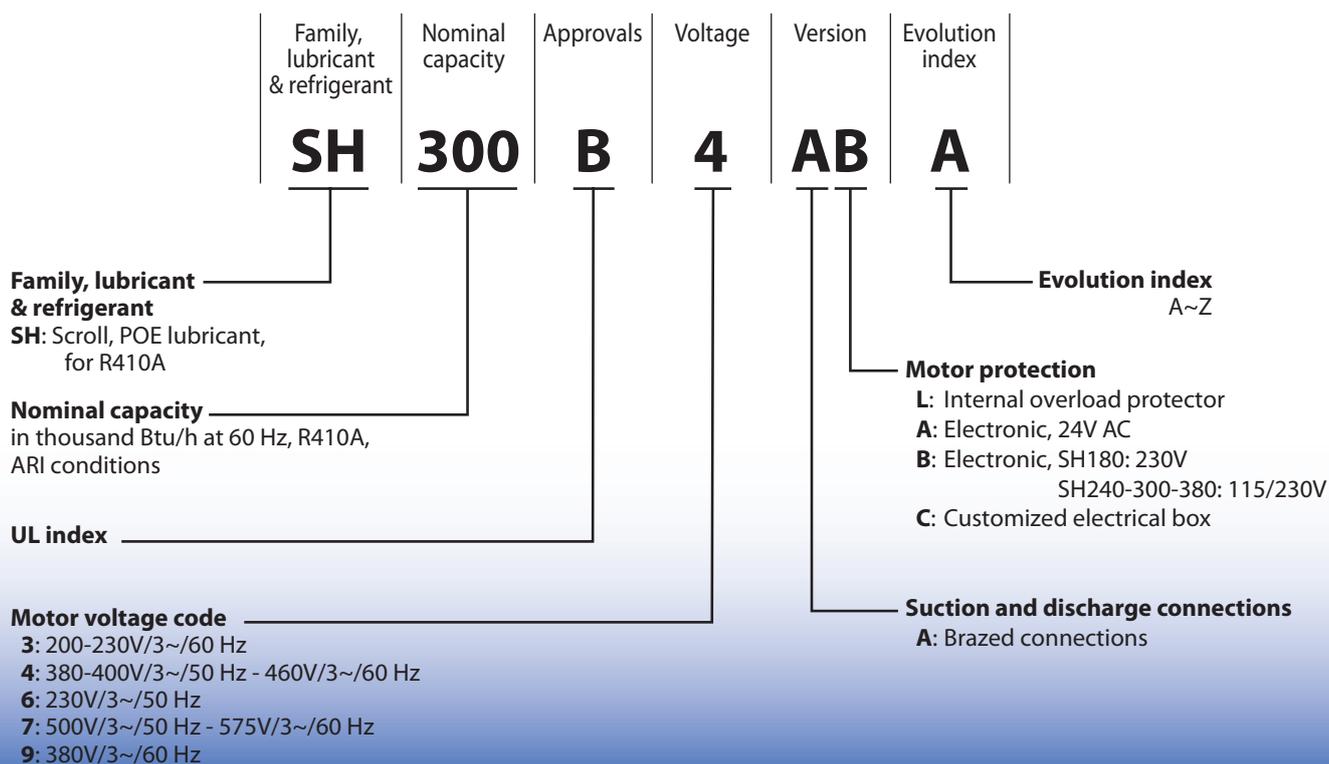


Model	D	H	H1	H2
SH090	243	482	235	451
SH105	243	540	278	509
SH120	243	540	278	509
SH140	243	540	278	509
SH161	243	540	278	509
SH184	243	555	300	525
SH180	318	682	331	647
SH240	318	682	331	647
SH295	318	682	331	647
SH300	333	723	331	664
SH380	333	755	331	696

All dimensions in mm

Motor voltage code	Code 4	Code 6	Code 7
Nominal voltage	380-400 V - 3 ph	230 V - 3 ph	500 V - 3 ph
Voltage range	340-440 V	207-253 V	450 - 550 V

Nameplate reference



Scroll compressors – SH series

Scroll compressors R410A · SH · 50 Hz

	Te	-20	-20	-15	-15	-10	-10	-5	-5	0	0	5	5	10	10	15	15
	Tc	Cooling (W)	Pe (kW)														
SH090-4	35	9600	4.97	12100	4.86	14900	4.78	18200	4.71	22000	4.66	26300	4.64	31300	4.64	36900	4.68
	45	8500	5.60	10500	6.08	13100	5.99	16100	5.91	19600	5.85	23500	5.82	28000	5.81	33200	5.83
	55	-	-	-	-	11300	7.09	13900	7.44	17000	7.38	20500	7.35	24500	7.33	29200	7.35
SH105-4	35	11800	5.93	14700	5.83	18000	5.74	21900	5.67	26300	5.62	31400	5.59	37100	5.58	43700	5.58
	45	10200	6.66	12900	7.24	15900	7.15	19400	7.08	23400	7.02	28100	6.99	33400	6.97	39400	6.97
	55	-	-	-	-	13900	8.35	16800	8.82	20400	8.77	24600	8.73	29400	8.72	34800	8.73
SH120-4	35	13400	6.56	16700	6.48	20500	6.38	24900	6.28	30000	6.20	35800	6.17	42400	6.21	49900	6.32
	45	11400	7.35	14600	8.05	18100	8.00	22100	7.92	26700	7.84	32000	7.77	38000	7.75	44900	7.78
	55	-	-	-	-	15200	9.34	19100	9.82	23200	9.79	27900	9.74	33300	9.71	39500	9.70
SH140-4	35	15500	7.38	19200	7.30	23400	7.20	28400	7.11	34000	7.06	40500	7.04	47800	7.09	56100	7.22
	45	13700	8.53	16900	9.12	20800	9.04	25200	8.93	30400	8.83	36200	8.73	42900	8.68	50500	8.67
	55	-	-	-	-	18000	10.75	21700	11.20	26200	11.08	31400	10.95	37400	10.83	44200	10.72
SH161-4	35	17600	7.78	21700	7.77	26500	7.79	32100	7.83	38500	7.88	45800	7.92	54100	7.93	63600	7.91
	45	15100	9.80	19100	9.72	23500	9.72	28600	9.75	34400	9.79	41000	9.83	48700	9.87	57300	9.88
	55	-	-	-	-	19900	12.37	24600	12.16	29700	12.17	35700	12.20	42500	12.23	50300	12.25
SH180-4	35	19200	9.09	24000	9.12	29600	9.14	36000	9.16	43500	9.19	52100	9.23	61800	9.30	72700	9.38
	45	16600	11.26	21000	11.30	26200	11.33	32100	11.34	39000	11.34	46800	11.34	55700	11.35	65800	11.37
	55	-	-	-	-	22300	14.12	27600	14.12	33700	14.10	40700	14.07	48700	14.03	57800	13.99
SH184-4	35	19800	9.25	24500	9.16	29900	9.09	36200	9.04	43400	9.04	51700	9.08	61200	9.20	71900	9.39
	45	17800	10.65	21600	11.43	26500	11.34	32200	11.25	38700	11.20	46300	11.18	54800	11.21	64600	11.31
	55	-	-	-	-	23400	13.36	27800	13.98	33600	13.89	40200	13.82	47900	13.78	56600	13.80
SH240-4	35	26700	11.95	33200	12.02	40700	12.06	49200	12.11	59000	12.17	70200	12.27	82800	12.43	97100	12.65
	45	23300	14.80	29300	14.90	36100	14.97	43900	15.02	52800	15.06	63000	15.12	74500	15.21	87400	15.34
	55	-	-	-	-	30900	18.57	37800	18.64	45800	18.69	54800	18.72	65100	18.77	76800	18.85
SH295-4	35	33300	14.42	40900	14.61	49800	14.77	60200	14.95	72100	15.19	85700	15.53	101200	16.03	118600	16.72
	45	29400	17.53	36300	17.83	44400	18.05	53800	18.23	64600	18.41	76900	18.64	91000	18.96	107000	19.42
	55	-	-	-	-	38500	22.00	46700	22.27	56200	22.48	67200	22.68	79800	22.91	94100	23.22
SH300-4	35	34000	14.96	42000	15.13	51300	15.30	62100	15.49	74400	15.70	88500	15.96	104600	16.27	122700	16.66
	45	29800	18.35	37100	18.51	45500	18.67	55200	18.84	66500	19.03	79300	19.26	93900	19.55	110500	19.91
	55	-	-	-	-	39000	22.98	47600	23.13	57500	23.30	68900	23.50	82000	23.75	96900	24.07
SH380-4	35	40400	18.41	50000	18.58	61100	18.70	74000	18.83	88900	18.99	105900	19.24	125300	19.61	147200	20.15
	45	35500	22.35	44200	22.65	54300	22.85	66000	22.99	79600	23.12	95100	23.26	112900	23.48	133000	23.80
	55	-	-	-	-	46600	27.95	57000	28.19	69000	28.35	82900	28.47	98900	28.61	117100	28.79

To: Evaporating temperature in °C
Tc: Condensing temperature in °C

Qc: Cooling capacity in W
Pe: Power input in kW

Superheat = 11.1 K
Subcooling = 8.3 K

Voltage: 400 V / 3 / 50 Hz

Further reference



Compressor model	Connections	Mounting feet	Motor protection	Nbr	Code no. for Multi pack		Code no. for Single pack		
					4	4	6	7	
									460/3/60 380-400/3/50
SH090	Brazed	Flexible	Internal	8	120H0004	120H0003	120H0005	120H0007	
SH105	Brazed	Flexible	Internal	8	120H0212	120H0211	120H0213	120H0215	
SH120	Brazed	Flexible	Internal	8	120H0014	120H0013	120H0015	120H0017	
SH140	Brazed	Flexible	Internal	8	120H0202	120H0201	120H0203	120H0205	
SH161	Brazed	Flexible	Internal	8	120H0024	120H0023	120H0025	120H0027	
SH184	Brazed	Flexible	Internal	8	120H0362	120H0361	120H0363	120H0365	
SH180 ①	Brazed	rigid	Module 24V AC *	6	120H0268	120H0267	-	120H0269	
	Brazed	rigid	Module 230 V *	6	120H0276	120H0457	-	120H0459	
SH240 ①	Brazed	rigid	Module 24V AC *	6	120H0292	120H0291	-	120H0293	
	Brazed	rigid	Module 115-230 V *	6	120H0300	120H0465	-	120H0467	
SH245 ①	Brazed	rigid	Module 24V AC *	6	120H0292	120H0291	-	120H0293	
	Brazed	rigid	Module 115-230 V *	6	120H0300	120H0465	-	120H0467	
SH300 ①	Brazed	rigid	Module 24V AC *	4	120H0238	120H0237	-	120H0241	
	Brazed	rigid	Module 115-230 V *	4	120H0240	120H0473	-	120H0475	
SH380 ①	Brazed	rigid	Module 24V AC *	4	120H0254	120H0253	-	120H0257	
	Brazed	rigid	Module 115-230 V *	4	120H0256	120H0481	-	120H0483	

① models with rigid mounting feet are for parallel mounting only. For single mounting use flexible grommet kit ref 8156138

* Electronic motor protection, module located in terminal box

Scroll compressors - R404A

Model	To	-25			-20		-15		-10		-5		0		5		10	
	Tc	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	
50Hz	MLZ015T4	30	2 300	1.2	2 900	1.2	3 500	1.2	4 300	1.2	5 200	1.2	6 200	1.2	7 400	1.1	8 700	1.1
		40	1 900	1.6	2 400	1.6	3 000	1.6	3 700	1.5	4 400	1.5	5 300	1.5	6 300	1.5	7 400	1.5
		50	-	-	1 800	2.1	2 400	2.0	2 900	2.0	3 600	1.9	4 300	1.9	5 100	1.9	6 000	1.9
	MLZ019T4	30	3 000	1.5	3 800	1.5	4 600	1.5	5 600	1.5	6 700	1.5	8 000	1.5	9 500	1.5	11 200	1.6
		40	2 600	1.9	3 300	1.9	4 000	1.9	4 800	1.9	5 800	1.9	6 900	1.9	8 200	1.9	9 700	1.9
		50	-	-	2 700	2.4	3 300	2.4	4 000	2.4	4 800	2.4	5 800	2.4	6 800	2.4	8 100	2.3
	MLZ021T4	30	3 200	1.6	4 000	1.6	4 900	1.6	5 900	1.6	7 100	1.6	8 500	1.6	10 000	1.7	11 800	1.7
		40	2 800	2.0	3 500	2.0	4 300	2.0	5 100	2.0	6 200	2.0	7 300	2.0	8 700	2.0	10 300	2.0
		50	-	-	2 900	2.5	3 500	2.5	4 300	2.6	5 100	2.5	6 100	2.5	7 300	2.5	8 600	2.4
	MLZ026T4	30	4 100	2.0	5 000	2.0	6 100	2.0	7 400	2.0	8 900	2.0	10 600	2.0	12 500	2.0	14 700	2.0
		40	3 500	2.5	4 300	2.5	5 300	2.5	6 400	2.5	7 700	2.5	9 200	2.5	10 900	2.5	12 800	2.5
		50	-	-	3 600	3.2	4 400	3.2	5 300	3.2	6 400	3.2	7 700	3.1	9 100	3.1	10 700	3.2
	MLZ030T4	30	4 900	2.3	6 000	2.4	7 300	2.4	8 900	2.4	10 700	2.4	12 700	2.4	15 100	2.4	17 700	2.3
		40	4 200	2.9	5 200	3.0	6 400	3.0	7 700	3.0	9 300	3.0	11 100	3.0	13 100	3.0	15 400	2.9
		50	-	-	4 300	3.7	5 300	3.7	6 400	3.7	7 700	3.7	9 200	3.7	11 000	3.7	12 900	3.7
	MLZ038T4	30	5 800	2.8	7 200	2.8	8 800	2.8	10 600	2.9	12 800	2.9	15 200	2.9	18 000	2.8	21 200	2.7
		40	5 000	3.6	6 200	3.5	7 600	3.5	9 200	3.6	11 100	3.6	13 200	3.6	15 600	3.6	18 400	3.5
		50	-	-	5 100	4.5	6 300	4.4	7 700	4.4	9 200	4.4	11 000	4.5	13 100	4.4	15 400	4.4
	MLZ042T4	30	6 300	3.2	7 900	3.3	9 800	3.4	12 000	3.5	14 500	3.6	17 500	3.6	20 900	3.6	24 800	3.5
		40	5 500	4.1	6 900	4.1	8 500	4.2	10 400	4.2	12 500	4.3	15 100	4.3	18 000	4.3	21 500	4.3
50		-	-	5 800	5.3	7 100	5.3	8 600	5.3	10 400	5.3	12 600	5.3	15 100	5.3	18 100	5.3	
MLZ045T4	30	7 000	3.4	8 600	3.4	10 600	3.4	12 800	3.5	15 400	3.5	18 300	3.5	21 600	3.4	25 300	3.2	
	40	6 100	4.3	7 500	4.3	9 100	4.3	11 100	4.3	13 300	4.3	15 900	4.3	18 800	4.3	22 000	4.2	
	50	-	-	6 200	5.5	7 600	5.4	9 200	5.4	11 100	5.4	13 200	5.4	15 700	5.4	18 500	5.3	
MLZ048T4	30	7 600	3.7	9 400	3.7	11 500	3.7	13 900	3.7	16 700	3.7	19 900	3.7	23 600	3.7	27 900	3.6	
	40	6 600	4.6	8 200	4.6	10 000	4.6	12 100	4.6	14 500	4.6	17 300	4.6	20 500	4.6	24 200	4.6	
	50	-	-	6 800	5.8	8 300	5.8	10 100	5.8	12 100	5.8	14 400	5.8	17 100	5.8	20 300	5.7	
MLZ058T4	30	9 300	4.3	11 300	4.4	13 800	4.5	16 900	4.5	20 400	4.5	24 400	4.6	28 900	4.6	33 700	4.7	
	40	7 600	5.5	9 300	5.6	11 600	5.6	14 300	5.6	17 400	5.5	20 900	5.6	24 800	5.6	29 000	5.8	
	50	-	-	7 100	7.2	9 000	7.1	11 300	7.0	14 000	6.9	17 000	6.9	20 300	6.9	23 900	7.1	
MLZ066T4	30	10 400	4.9	12 900	5.0	15 700	5.0	19 000	5.1	22 800	5.2	27 200	5.3	32 300	5.5	38 000	5.8	
	40	9 000	6.1	11 200	6.1	13 600	6.2	16 500	6.2	19 800	6.3	23 600	6.4	27 900	6.5	32 800	6.7	
	50	-	-	9 200	7.7	11 400	7.7	13 800	7.7	16 600	7.7	19 700	7.8	23 300	7.8	27 400	7.9	
MLZ076T4	30	12 200	5.7	15 200	5.7	18 500	5.7	22 400	5.8	26 800	5.9	31 900	6.1	37 800	6.2	44 600	6.3	
	40	10 600	7.0	13 100	7.0	15 900	7.1	19 100	7.1	22 900	7.2	27 200	7.3	32 300	7.4	38 200	7.5	
	50	-	-	11 000	8.7	13 000	8.7	15 400	8.8	18 300	8.9	21 800	8.9	25 900	9.0	30 800	9.0	
60Hz	MLZ015T4	30	2 800	1.5	3 500	1.5	4 300	1.5	5 200	1.5	6 200	1.5	7 500	1.4	8 900	1.4	10 500	1.4
		40	2 300	1.9	2 900	1.9	3 600	1.9	4 500	1.9	5 400	1.9	6 400	1.8	7 600	1.8	9 000	1.8
		50	-	-	2 300	2.3	3 000	2.3	3 700	2.4	4 400	2.3	5 300	2.3	6 300	2.3	7 500	2.3
	MLZ019T4	30	3 800	1.8	4 600	1.8	5 700	1.8	6 800	1.8	8 200	1.8	9 700	1.8	11 500	1.9	13 500	1.9
		40	3 200	2.2	4 000	2.3	4 900	2.3	5 900	2.3	7 100	2.3	8 400	2.3	10 000	2.3	11 700	2.3
		50	-	-	3 300	2.8	4 100	2.8	5 000	2.9	6 000	2.9	7 100	2.9	8 400	2.8	9 900	2.8
	MLZ021T4	30	4 000	1.8	4 900	1.9	6 000	2.0	7 300	2.0	8 700	2.0	10 400	2.0	12 200	2.0	14 200	2.1
		40	3 400	2.3	4 300	2.4	5 200	2.4	6 300	2.5	7 600	2.4	9 000	2.4	10 600	2.4	12 400	2.5
		50	-	-	3 600	3.0	4 400	3.1	5 300	3.1	6 400	3.0	7 600	3.0	9 000	3.0	10 500	3.0
	MLZ026T4	30	5 000	2.3	6 100	2.4	7 500	2.5	9 100	2.5	10 900	2.5	12 900	2.5	15 200	2.5	17 800	2.5
		40	4 300	2.9	5 300	3.0	6 500	3.1	7 900	3.1	9 400	3.1	11 200	3.1	13 200	3.1	15 400	3.1
		50	-	-	4 400	3.7	5 400	3.8	6 600	3.8	7 900	3.8	9 400	3.8	11 100	3.8	13 000	3.8
	MLZ030T4	30	5 800	2.7	7 200	2.8	8 800	2.8	10 700	2.8	12 800	2.9	15 200	2.9	17 800	2.8	20 800	2.8
		40	5 100	3.5	6 300	3.5	7 600	3.5	9 300	3.5	11 100	3.5	13 200	3.5	15 500	3.5	18 200	3.5
		50	-	-	5 200	4.3	6 400	4.3	7 700	4.3	9 300	4.4	11 100	4.4	13 100	4.4	15 400	4.4
	MLZ038T4	30	7 000	3.4	8 600	3.3	10 500	3.4	12 700	3.4	15 300	3.4	18 100	3.4	21 400	3.4	25 100	3.3
		40	6 000	4.2	7 500	4.2	9 200	4.2	11 100	4.2	13 300	4.2	15 800	4.3	18 600	4.2	21 800	4.2
		50	-	-	6 200	5.2	7 700	5.2	9 300	5.2	11 200	5.3	13 300	5.3	15 600	5.3	18 300	5.2
	MLZ042T4	30	8 100	3.9	10 100	4.0	12 300	4.1	14 800	4.1	17 700	4.0	21 100	4.0	24 800	4.0	29 100	4.1
		40	7 000	5.0	8 700	5.1	10 700	5.1	12 900	5.1	15 400	5.1	18 300	5.1	21 600	5.0	25 300	5.1
50		-	-	7 200	6.4	8 900	6.4	10 800	6.4	12 900	6.4	15 400	6.3	18 200	6.3	21 400	6.3	
MLZ045T4	30	8 500	4.0	10 500	4.0	12 800	4.0	15 500	4.1	18 600	4.1	22 100	4.1	26 000	4.1	30 400	4.1	
	40	7 400	4.9	9 100	5.0	11 100	5.0	13 500	5.0	16 100	5.0	19 100	5.0	22 600	5.1	26 400	5.1	
	50	-	-	7 600	6.3	9 300	6.3	11 300	6.3	13 500	6.3	16 100	6.3	19 000	6.3	22 300	6.3	
MLZ048T4	30	9 300	4.3	11 400	4.3	14 000	4.4	16 900	4.4	20 300	4.5	24 100	4.5	28 400	4.4	33 100	4.3	
	40	8 100	5.4	9 900	5.4	12 100	5.5	14 700	5.5	17 600	5.6	21 000	5.6	24 700	5.5	28 800	5.5	
	50	-	-	8 300	6.8	10 100	6.8	12 300	6.8	14 800	6.9	17 600	6.9	20 800	6.9	24 300	6.8	
MLZ058T4	30	10 800	5.2	13 600	5.3	16 800	5.4	20 500	5.5	24 800	5.6	29 600	5.7	35 000	5.8	40 900	5.8	
	40	9 000	6.6	11 400	6.5	14 200	6.6	17 400	6.6	21 100	6.7	25 300	6.9	29 900	7.0	35 100	7.0	
	50	-	-	8 900	8.3	11 200	8.2	13 900	8.2	17 000	8.2	20 400	8.3	24 300	8.4	28 500	8.5	
MLZ066T4	30	12																

Scroll compressors - R134a

Model	To	-10		-5		0		5		10		15		
	Tc	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	
50Hz	MLZ015T4	30	2 400	0.7	3 000	0.7	3 700	0.8	4 500	0.8	5 400	0.8	-	-
		40	-	-	2 700	0.9	3 300	0.9	4 100	0.9	4 900	0.9	5 900	1.0
		50	-	-	2 400	1.1	3 000	1.1	3 600	1.2	4 400	1.2	5 200	1.2
	MLZ019T4	30	3 100	0.9	3 800	1.0	4 700	1.0	5 800	1.0	7 000	1.0	-	-
		40	-	-	3 500	1.2	4 300	1.2	5 200	1.2	6 300	1.2	7 600	1.2
		50	-	-	3 100	1.4	3 800	1.5	4 700	1.5	5 600	1.5	6 700	1.5
	MLZ021T4	30	3 300	1.0	4 100	1.0	5 000	1.0	6 100	1.0	7 400	1.0	-	-
		40	-	-	3 700	1.2	4 600	1.2	5 600	1.2	6 700	1.3	8 000	1.3
		50	-	-	3 300	1.5	4 000	1.5	4 900	1.5	6 000	1.5	7 200	1.6
	MLZ026T4	30	4 100	1.2	5 100	1.2	6 200	1.2	7 600	1.2	9 100	1.3	-	-
		40	-	-	4 600	1.5	5 600	1.5	6 900	1.5	8 300	1.5	9 900	1.6
		50	-	-	4 100	1.8	5 000	1.8	6 100	1.9	7 400	1.9	8 900	1.9
	MLZ030T4	30	4 900	1.4	6 100	1.4	7 500	1.4	9 100	1.5	11 000	1.5	-	-
		40	-	-	5 500	1.8	6 800	1.8	8 300	1.8	10 000	1.8	12 000	1.8
		50	-	-	4 900	2.2	6 000	2.2	7 400	2.2	8 900	2.2	10 700	2.3
	MLZ038T4	30	5 800	1.7	7 200	1.7	8 800	1.8	10 700	1.8	12 900	1.8	-	-
		40	-	-	6 500	2.2	8 000	2.2	9 700	2.2	11 700	2.2	14 000	2.2
		50	-	-	5 700	2.6	7 100	2.7	8 700	2.7	10 500	2.7	12 500	2.7
MLZ042T5	30	6 600	2.1	8 200	2.2	10 100	2.2	12 100	2.3	14 400	2.4	-	-	
	40	-	-	7 500	2.6	9 200	2.6	11 100	2.7	13 200	2.7	15 700	2.8	
	50	-	-	6 500	3.1	8 100	3.1	9 900	3.2	11 800	3.2	14 100	3.2	
MLZ045T4	30	7 100	2.0	8 900	2.0	11 000	2.0	13 300	2.0	16 000	2.0	-	-	
	40	-	-	8 000	2.5	9 900	2.5	12 100	2.5	14 600	2.5	17 400	2.6	
	50	-	-	7 100	3.0	8 800	3.1	10 800	3.1	13 000	3.1	15 600	3.2	
MLZ048T4	30	7 600	2.1	9 500	2.1	11 600	2.2	14 100	2.2	16 900	2.2	-	-	
	40	-	-	8 500	2.7	10 500	2.7	12 800	2.7	15 400	2.7	18 300	2.7	
	50	-	-	7 500	3.3	9 300	3.3	11 400	3.4	13 800	3.4	16 400	3.4	
MLZ058T4	30	9 100	2.6	11 300	2.7	13 800	2.8	16 600	2.8	20 000	2.9	-	-	
	40	-	-	10 100	3.3	12 400	3.4	15 100	3.4	18 100	3.4	21 500	3.4	
	50	-	-	9 000	4.1	11 100	4.1	13 400	4.2	16 100	4.2	19 200	4.1	
MLZ066T4	30	10 500	3.0	13 100	3.1	16 000	3.1	19 300	3.2	23 200	3.2	-	-	
	40	-	-	11 800	3.8	14 500	3.8	17 500	3.9	21 100	3.9	25 000	3.9	
	50	-	-	10 400	4.6	12 800	4.7	15 600	4.7	18 800	4.8	22 300	4.7	
MLZ076T4	30	11 800	3.4	14 600	3.5	17 900	3.6	21 600	3.7	25 800	3.7	-	-	
	40	-	-	13 100	4.3	16 100	4.4	19 600	4.4	23 500	4.4	28 000	4.4	
	50	-	-	11 600	5.3	14 300	5.4	17 400	5.4	21 000	5.4	25 000	5.3	
60Hz	MLZ015T4	30	3 000	0.9	3 700	0.9	4 600	0.9	5 500	0.9	6 600	1.0	-	-
		40	-	-	3 400	1.1	4 200	1.1	5 100	1.1	6 100	1.2	7 200	1.2
		50	-	-	3 000	1.3	3 700	1.4	4 600	1.4	5 500	1.4	6 500	1.4
	MLZ019T4	30	3 800	1.2	4 800	1.2	5 900	1.2	7 100	1.2	8 500	1.3	-	-
		40	-	-	4 300	1.4	5 400	1.5	6 500	1.5	7 800	1.5	9 300	1.5
		50	-	-	3 900	1.7	4 800	1.8	5 900	1.8	7 100	1.8	8 400	1.8
	MLZ021T4	30	4 100	1.2	5 100	1.2	6 200	1.2	7 600	1.2	9 100	1.3	-	-
		40	-	-	4 600	1.5	5 700	1.5	6 900	1.5	8 300	1.5	9 900	1.6
		50	-	-	4 100	1.8	5 100	1.8	6 200	1.9	7 500	1.9	8 900	1.9
	MLZ026T4	30	5 000	1.4	6 300	1.5	7 700	1.5	9 300	1.5	11 200	1.6	-	-
		40	-	-	5 700	1.8	7 000	1.8	8 600	1.9	10 300	1.9	12 200	1.9
		50	-	-	5 100	2.2	6 300	2.2	7 700	2.3	9 300	2.3	11 000	2.3
	MLZ030T4	30	6 000	1.8	7 500	1.8	9 300	1.8	11 300	1.8	13 500	1.9	-	-
		40	-	-	6 800	2.2	8 500	2.2	10 300	2.2	12 400	2.3	14 700	2.3
		50	-	-	6 100	2.6	7 600	2.7	9 300	2.7	11 200	2.8	13 300	2.8
	MLZ038T4	30	7 100	2.1	8 800	2.1	10 900	2.2	13 200	2.2	15 900	2.3	-	-
		40	-	-	8 000	2.6	9 900	2.6	12 100	2.7	14 600	2.7	17 300	2.8
		50	-	-	7 200	3.1	8 900	3.2	10 900	3.2	13 200	3.3	15 700	3.3
MLZ042T1	30	8 000	2.6	9 900	2.6	12 100	2.7	14 600	2.8	17 300	2.8	-	-	
	40	-	-	9 000	3.1	11 000	3.2	13 400	3.2	16 000	3.3	19 000	3.4	
	50	-	-	7 900	3.7	9 800	3.8	11 900	3.8	14 400	3.9	17 200	4.0	
MLZ045T4	30	8 800	2.4	11 000	2.5	13 500	2.5	16 300	2.6	19 500	2.6	-	-	
	40	-	-	9 900	3.0	12 200	3.1	14 800	3.1	17 800	3.2	21 100	3.3	
	50	-	-	8 600	3.7	10 700	3.8	13 100	3.8	15 800	3.9	18 900	3.9	
MLZ048T4	30	9 300	2.6	11 600	2.7	14 200	2.7	17 200	2.8	20 600	2.9	-	-	
	40	-	-	10 400	3.3	12 900	3.3	15 600	3.4	18 800	3.4	22 200	3.5	
	50	-	-	9 200	4.0	11 300	4.1	13 900	4.1	16 700	4.2	19 900	4.2	
MLZ058T4	30	11 100	3.1	13 700	3.2	16 800	3.3	20 200	3.5	24 000	3.6	-	-	
	40	-	-	12 400	4.0	15 200	4.1	18 300	4.2	21 900	4.2	25 900	4.3	
	50	-	-	11 000	4.8	13 500	5.0	16 300	5.1	19 600	5.1	23 300	5.1	
MLZ066T4	30	12 700	3.6	15 700	3.7	19 200	3.8	23 200	4.0	27 600	4.1	-	-	
	40	-	-	14 200	4.5	17 400	4.7	21 100	4.8	25 200	4.9	29 800	4.9	
	50	-	-	12 600	5.5	15 500	5.7	18 800	5.8	22 500	5.9	26 700	5.9	
MLZ076T4	30	14 300	4.1	17 600	4.2	21 500	4.4	26 000	4.5	31 000	4.7	-	-	
	40	-	-	16 000	5.2	19 600	5.3	23 600	5.5	28 300	5.6	33 400	5.6	
	50	-	-	14 200	6.4	17 400	6.5	21 100	6.6	25 300	6.7	29 800	6.7	

Legend: To: Evaporating temperature in °C
Tc: Condensing temperature in °C
Capacity data at other conditions are available in the datasheets at: www.danfoss.com/odsg

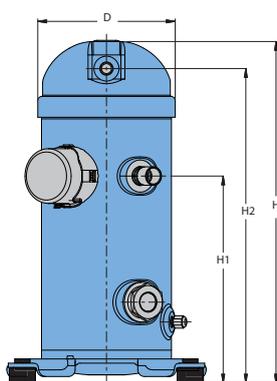
Qo: Cooling capacity in W
Pe: Power input in kW

RGT = 20°C
Subcooling = 0 K

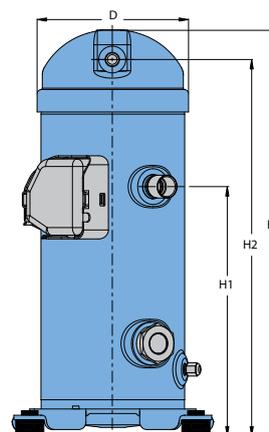
Scroll compressors • MLZ

Model	Dimensions (mm)			
	D	H	H1	H2
MLZ 015	165	412	250	379
MLZ 019	165	412	250	379
MLZ 021	165	412	250	379
MLZ 026	165	412	250	379
MLZ 030	184	455	280	422
MLZ 038	184	455	280	422
MLZ 045	184	455	280	422
MLZ 048	184	455	280	422
MLZ 058	185	536	369	509
MLZ 066	185	545	369	518
MLZ 076	185	545	369	518

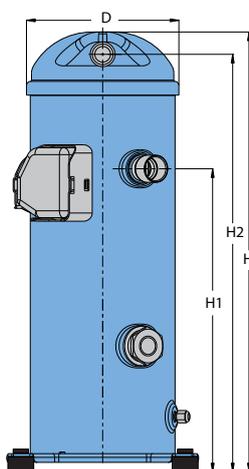
MLZ 015 - 019 - 021 - 026



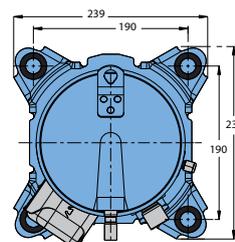
MLZ 030 - 038 - 045 - 048



MLZ 058 - 066 - 076



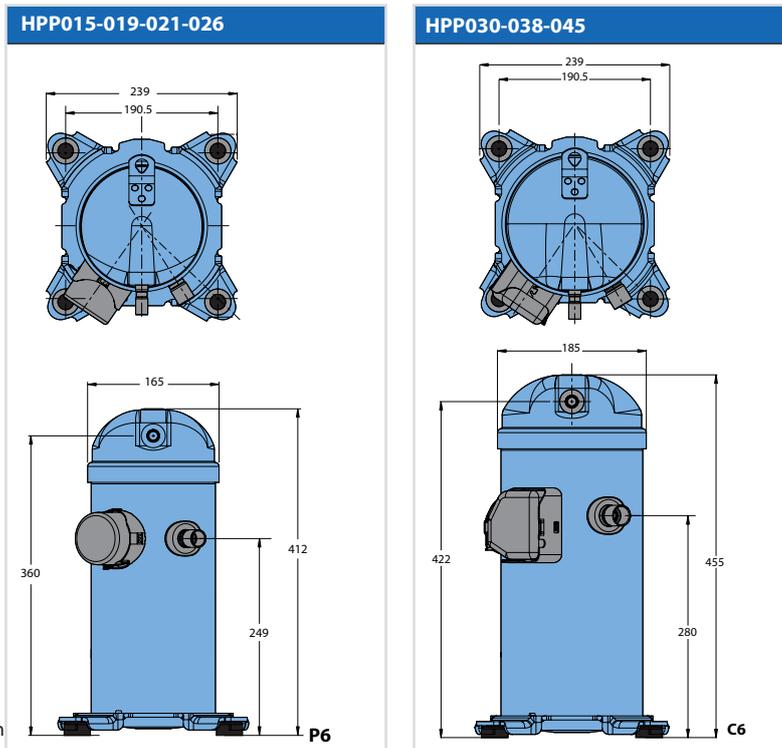
Common footprint • MLZ 015 - 076



Nomenclature

	Type	Size	Motor	Features	Other features										
Application M: medium temperature refrigeration	MLZ	021	T4L	P9	<table border="1"> <thead> <tr> <th>Oil sight glass</th> <th>Oil equalisation</th> <th>Oil drain</th> <th>LP gauge port</th> <th>Gas equalisation port</th> </tr> </thead> <tbody> <tr> <td>9 Threaded</td> <td>None</td> <td>Schrader</td> <td>None</td> <td>None</td> </tr> </tbody> </table>	Oil sight glass	Oil equalisation	Oil drain	LP gauge port	Gas equalisation port	9 Threaded	None	Schrader	None	None
Oil sight glass	Oil equalisation	Oil drain	LP gauge port	Gas equalisation port											
9 Threaded	None	Schrader	None	None											
Family, Refrigerant & lubricant LZ: R404A - R507 - R134a - R22, PVE lubricant															
Nominal capacity In thousand Btu/h at 60 Hz, ARI, MBP conditions															
Model variation T: design optimised for refrigeration															
					Tubing and electrical connections P: brazed connections, spade terminals C: brazed connections, screw terminals										
					Motor protection L: internal motor protection										
					Motor voltage code 1: 208-230V/1~/60 Hz 2: 200-220V/3~/50 Hz & 208-230V/3~/60 Hz 4: 380-400V/3~/50 Hz & 460V/3~/60 Hz 5: 220-240V/1~/50 Hz 7: 500V/3~/50 Hz & 575V/ 3~/60 Hz 9: 380V/3~/60 Hz										

Performer® heat pump scroll compressors



All dimensions in mm

P6

C6

Performance table R407C

Model	To	-25		-20		-15		-10		-5		0		5		10		15	
	Tc	H	Pe	H	Pe	H	Pe	H	Pe	H	Pe	H	Pe	H	Pe	H	Pe	H	Pe
HHP015T4	40	2 550	1.1	3 070	1.1	3 720	1.2	4 510	1.3	5 450	1.3	6 520	1.4	7 730	1.4	9 080	1.4	10 570	1.4
	50	2 620	1.5	3 050	1.5	3 620	1.5	4 320	1.5	5 150	1.6	6 120	1.6	7 220	1.7	8 460	1.7	9 840	1.7
	60	-	-	-	-	3 860	2.2	4 410	2.1	5 090	2.1	5 890	2.1	6 830	2.1	7 900	2.1	9 100	2.1
HHP019T4	40	3 070	1.3	3 680	1.4	4 450	1.5	5 400	1.5	6 520	1.6	7 810	1.7	9 270	1.7	10 900	1.7	12 690	1.7
	50	3 180	1.7	3 680	1.7	4 340	1.8	5 180	1.9	6 180	1.9	7 340	2.0	8 670	2.1	10 160	2.2	11 830	2.2
	60	-	-	-	-	4 660	2.3	5 300	2.4	6 110	2.4	7 070	2.5	8 200	2.6	9 480	2.7	10 930	2.8
HHP021T4	40	3 530	1.4	4 250	1.5	5 090	1.6	6 080	1.7	7 230	1.7	8 570	1.8	10 100	1.8	11 840	1.7	13 820	1.7
	50	3 430	1.6	4 080	1.8	4 860	1.9	5 770	2.0	6 830	2.1	8 070	2.1	9 500	2.2	11 140	2.2	13 000	2.2
	60	-	-	-	-	4 710	2.2	5 530	2.3	6 510	2.5	7 650	2.6	8 970	2.7	10 490	2.8	12 240	2.8
HHP026T4	40	4 540	1.7	5 410	1.9	6 440	2.0	7 650	2.1	9 070	2.1	10 740	2.2	12 690	2.2	14 950	2.1	17 550	2.0
	50	4 590	2.0	5 350	2.1	6 260	2.3	7 330	2.4	8 610	2.6	10 120	2.6	11 900	2.7	13 970	2.7	16 370	2.7
	60	-	-	-	-	6 240	2.7	7 150	2.9	8 250	3.0	9 560	3.2	11 130	3.3	12 980	3.3	15 150	3.3
HHP030T4	40	4 910	2.1	6 100	2.3	7 480	2.4	9 050	2.6	10 830	2.6	12 830	2.7	15 060	2.7	17 520	2.8	20 240	2.9
	50	4 830	2.3	5 940	2.6	7 230	2.8	8 690	3.0	10 350	3.1	12 200	3.2	14 270	3.4	16 560	3.5	19 090	3.6
	60	-	-	-	-	7 000	3.1	8 330	3.4	9 850	3.6	11 550	3.8	13 440	4.0	15 540	4.2	17 870	4.4
HHP038T4	40	6 150	2.4	7 600	2.8	9 360	3.0	11 390	3.2	13 660	3.2	16 130	3.3	18 750	3.3	21 510	3.4	24 360	3.6
	50	5 730	2.2	7 120	2.8	8 800	3.3	10 740	3.6	12 890	3.8	15 220	4.0	17 700	4.1	20 280	4.2	22 940	4.4
	60	-	-	-	-	8 090	3.2	9 930	3.8	11 970	4.2	14 170	4.5	16 500	4.7	18 920	5.0	21 400	5.2
HHP045T4	40	7 110	3.0	8 800	3.1	10 830	3.3	13 180	3.5	15 800	3.7	18 660	3.8	21 700	3.9	24 890	3.8	28 180	3.7
	50	6 630	3.5	8 240	3.7	10 190	3.9	12 420	4.2	14 910	4.4	17 610	4.6	20 480	4.7	23 460	4.8	26 540	4.8
	60	-	-	-	-	9 360	4.5	11 490	4.8	13 850	5.1	16 400	5.5	19 100	5.7	21 890	6.0	24 760	6.1

Legend:

To: Evaporating temperature in °C
Tc: Condensing temperature in °C

H: Heating capacity in W
Pe: Power input in kW

Superheat = 5 K
Subcooling = 5 K

Nomenclature

Type: **HHP**
Size: **030**
Motor: **T4L**
Features: **P6**

Application: _____
H: high temperature

Family: _____
HP: heat pump R407C PVE

Nominal capacity: _____

Model variation _____
T motor design

Other features

	Oil sight glass	Oil equalisation	Oil drain	LP gauge port	Gas equalisation port
6	None	None	None	None	None

Tubing and electrical connections
P: brazed connections, spade terminals
C: brazed connections, screw terminals

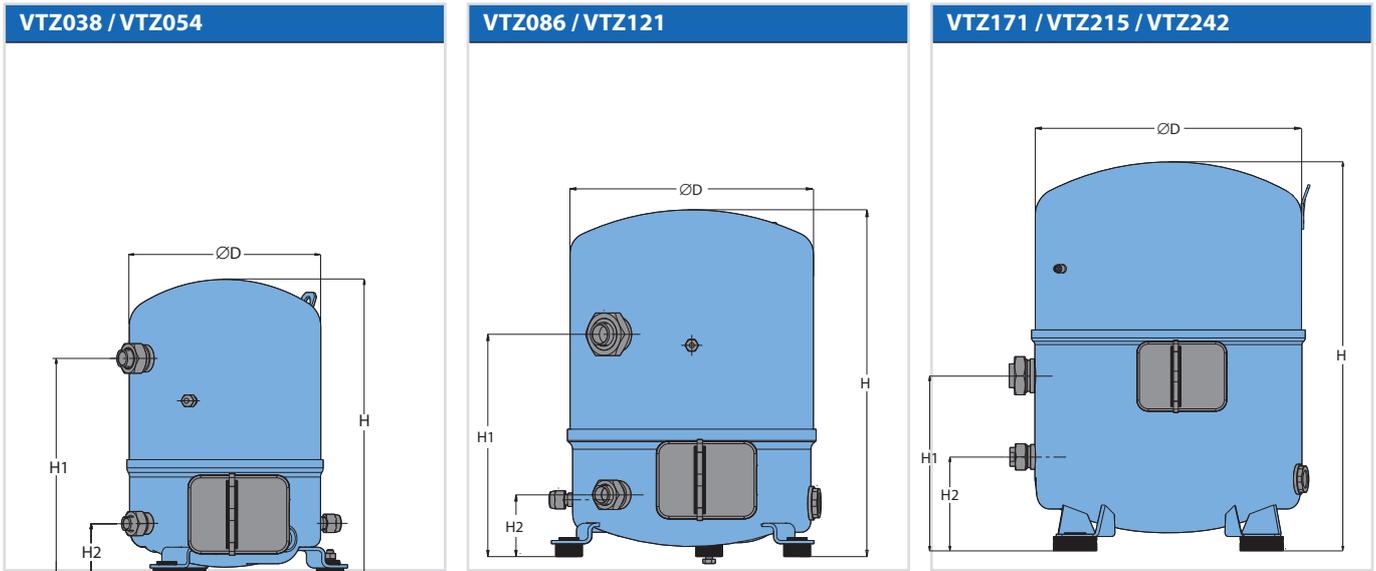
Motor protection
L: internal motor protection

Motor voltage code
4: 380-400V/3~/50 Hz
5: 220-240V/1~/50 Hz

Notes

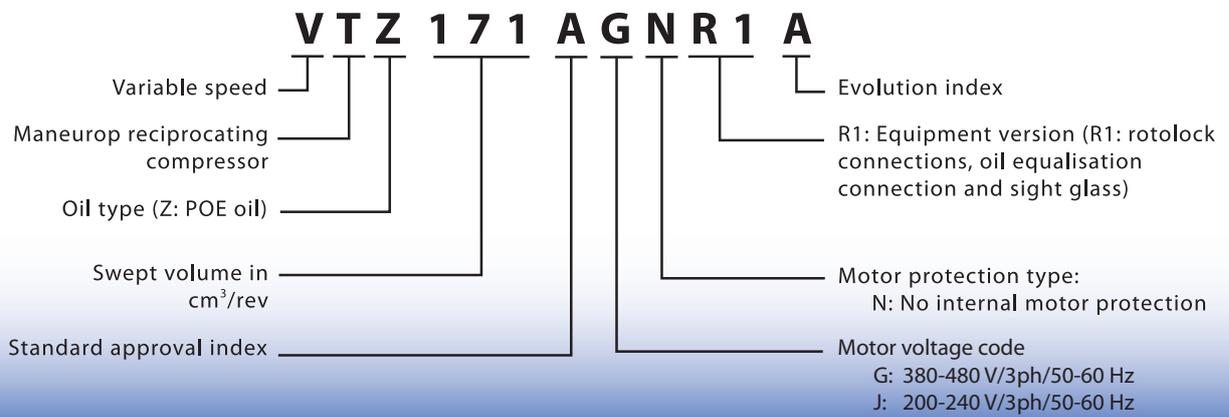
A large grid of graph paper for taking notes, consisting of 20 columns and 30 rows of small squares.

Reciprocating compressors – Variable speed

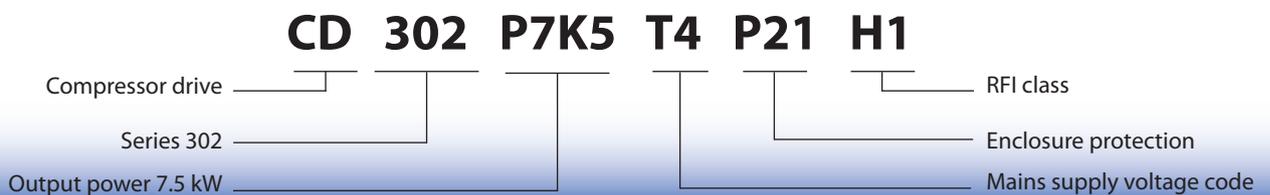


Type	Cylinders	Dimensions (mm)			
		D	H	H1	H2
VTZ038 / VTZ054	1	224	356	263	68
VTZ086 / VTZ121	2	288	413	265	74
VTZ171 / VTZ215 / VTZ242	4	352	518	233	125

Compressor nomenclature



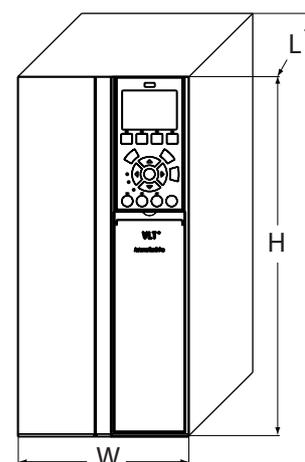
Frequency converter nomenclature



Drive supply voltage	Drive power (kW)	Compressor voltage code	Compressor model	IP20			IP21			IP55		
				Drive enclosure	Overall dimension (h×w×d) mm	Weight (kg)	Drive enclosure	Overall dimension (h×w×d) mm	Weight (kg)	Drive enclosure	Overall dimension (h×w×d) mm	Weight (kg)
T4 : 380-480/3/50-60	4	G	VTZ038	A2	268×90×205	4.9	-	-	-	A5	420×242×200	13.5
	5.5		VTZ054	A3	268×130×205	6.6	-	-	-	A5	420×242×200	13.5
	7.5		VTZ086	A3	268×130×205	6.6	-	-	-	A5	420×242×200	13.5
	11		VTZ121	B3	399×165×248	12	B1	494×242×260	23	B1	480×242×260	23
	15		VTZ171	B3	399×165×248	12	B1	494×242×260	23	B1	480×242×260	23
	18.5		VTZ215	B4	518×231×242	23	B2	664×242×260	27	B2	650×242×260	27
	22		VTZ242	-	-	-	B2	664×242×260	27	B2	650×242×260	27

Code numbers for ordering single pack compressors and frequency converters

Compressor		Frequency converter				
Model	Code No.	Model & power	IP class	RFI class*	LCP**	Code No.
VTZ038-G	120B0001	CD302 4.0 kW	IP20	H1	yes	131B3543
			IP55	H1	yes	131B3547
VTZ054-G	120B0002	CD302 5.5 kW	IP20	H1	yes	131B3552
			IP55	H1	yes	131B3556
VTZ086-G	120B0003	CD302 7.5 kW	IP20	H1	yes	131B3560
			IP55	H1	yes	131B3564
VTZ121-G	120B0004	CD302 11.0 kW	IP21	H1	yes	131B3568
			IP55	H1	yes	131B3572
VTZ171-G	120B0005	CD302 15.0 kW	IP21	H1	yes	131B3576
			IP55	H1	yes	131B3580
VTZ215-G	120B0006	CD302 18.5 kW	IP21	H1	yes	131B3584
			IP55	H1	yes	131B3588
VTZ242-G	120B0007	CD302 22.0 kW	IP21	H1	yes	131B3592
			IP55	H1	yes	131B3596



Listed code numbers are for compressors with voltage code G and frequency converters with supply voltage code T4 (380-400 V/3ph/50-60Hz). VTZ038 to VTZ121 are available with voltage code J (200-240V/3ph/50-60Hz) on request.

* RFI class H2 available on request

** Models without LCP available on request

Reciprocating compressors – variable speed

R404A

		To	-30		-25		-20		-15		-10		-5		0		5	
		Tc	Qo	Pe	Qo	Pe												
VTZ038																		
Min rpm	20	1 090	0.61	1 430	0.67	1 850	0.71	2 350	0.74	2 950	0.76	3 650	0.77	-	-	-	-	-
	40	610	0.64	850	0.75	1 140	0.85	1 500	0.94	1 920	1.02	2 430	1.09	3 030	1.14	3 730	1.18	-
	60	-	-	-	-	530	0.92	750	1.08	1 010	1.23	1 320	1.37	1 700	1.50	2 160	1.61	-
Max rpm	20	2 200	1.75	3 080	2.01	4 160	2.22	5 450	2.39	6 990	2.51	8 790	2.57	-	-	-	-	-
	40	1 140	1.60	1 860	2.03	2 710	2.43	3 740	2.78	4 960	3.10	6 400	3.37	8 070	3.60	10 010	3.78	-
	60	-	-	-	-	1 190	2.11	1 860	2.66	2 670	3.17	3 640	3.65	4 810	4.09	6 190	4.49	-
VTZ054																		
Min rpm	20	1 480	0.88	1 970	0.97	2 590	1.05	3 370	1.11	4 310	1.16	5 450	1.18	-	-	-	-	-
	40	920	0.96	1 260	1.11	1 690	1.25	2 220	1.38	2 890	1.50	3 700	1.60	4 670	1.69	5 820	1.76	-
	60	-	-	-	-	900	1.37	1 220	1.57	1 610	1.77	2 110	1.96	2 730	2.13	3 490	2.29	-
Max rpm	20	3 740	2.45	4 870	2.76	6 250	3.06	7 910	3.34	9 880	3.61	12 210	3.84	-	-	-	-	-
	40	2 170	2.43	3 090	2.84	4 190	3.28	5 520	3.72	7 110	4.15	9 000	4.59	11 210	5.02	13 800	5.43	-
	60	-	-	-	-	1 950	3.15	2 800	3.73	3 850	4.32	5 150	4.94	6 720	5.56	8 600	6.19	-
VTZ086																		
Min rpm	20	1 840	1.18	2 580	1.31	3 520	1.42	4 660	1.49	6 030	1.54	7 650	1.56	-	-	-	-	-
	40	930	1.16	1 420	1.42	2 040	1.66	2 800	1.85	3 720	2.02	4 830	2.16	6 140	2.27	7 670	2.35	-
	60	-	-	-	-	950	1.67	1 390	2.03	1 930	2.36	2 580	2.65	3 380	2.91	4 330	3.14	-
Max rpm	20	6 160	3.89	8 310	4.34	10 950	4.74	14 130	5.09	17 890	5.40	22 290	5.66	-	-	-	-	-
	40	3 640	3.91	5 360	4.66	7 440	5.35	9 920	5.99	12 830	6.58	16 250	7.11	20 190	7.60	24 730	8.03	-
	60	-	-	-	-	3 420	5.16	5 060	6.15	6 990	7.08	9 280	7.96	11 970	8.78	15 110	9.55	-
VTZ121																		
Min rpm	20	2 750	1.89	3 660	2.05	4 810	2.19	6 230	2.30	7 940	2.39	9 980	2.46	-	-	-	-	-
	40	1 770	2.10	2 480	2.38	3 360	2.64	4 430	2.86	5 730	3.06	7 280	3.24	9 120	3.39	11 280	3.51	-
	60	-	-	-	-	1 650	2.82	2 300	3.21	3 090	3.57	4 070	3.90	5 270	4.20	6 700	4.48	-
Max rpm	20	8 060	5.47	10 760	6.11	14 150	6.73	18 330	7.32	23 400	7.85	29 440	8.31	-	-	-	-	-
	40	4 870	5.67	6 870	6.50	9 350	7.38	12 420	8.29	16 170	9.20	20 690	10.10	26 100	10.99	32 470	11.84	-
	60	-	-	-	-	4 860	7.52	6 750	8.62	9 120	9.79	12 070	11.02	15 690	12.29	20 070	13.58	-
VTZ171																		
Min rpm	20	3 900	2.31	5 360	2.59	7 180	2.83	9 400	3.04	12 050	3.20	15 160	3.31	-	-	-	-	-
	40	2 090	2.31	3 090	2.72	4 340	3.11	5 870	3.47	7 720	3.81	9 910	4.10	12 500	4.36	15 500	4.57	-
	60	-	-	-	-	2 070	3.24	2 940	3.84	4 010	4.41	5 320	4.97	6 900	5.49	8 790	5.98	-
Max rpm	20	11 310	7.31	15 890	8.35	21 460	9.26	28 030	10.05	35 630	10.73	44 290	11.32	-	-	-	-	-
	40	6 400	7.24	9 960	9.03	14 240	10.66	19 260	12.14	25 040	13.50	31 610	14.73	38 980	15.87	47 190	16.93	-
	60	-	-	-	-	6 470	9.78	9 910	12.09	13 850	14.25	18 310	16.27	23 310	18.16	28 870	19.95	-
VTZ215																		
Min rpm	20	4 790	3.00	6 690	3.31	9 050	3.58	11 940	3.79	15 400	3.95	19 490	4.04	-	-	-	-	-
	40	2 690	3.24	4 070	3.78	5 760	4.28	7 820	4.74	10 310	5.15	13 270	5.51	16 750	5.80	20 820	6.03	-
	60	-	-	-	-	2 800	4.52	4 060	5.30	5 600	6.03	7 450	6.72	9 670	7.36	12 330	7.95	-
Max rpm	20	15 190	9.71	20 520	11.10	27 020	12.40	34 830	13.62	44 110	14.73	54 990	15.73	-	-	-	-	-
	40	9 030	9.79	13 430	11.78	18 700	13.76	25 000	15.73	32 450	17.67	41 210	19.58	51 430	21.44	63 230	23.24	-
	60	-	-	-	-	8 910	13.17	12 970	15.77	17 900	18.43	23 830	21.13	30 910	23.85	39 290	26.60	-
VTZ242																		
Min rpm	20	5 250	3.37	7 200	3.70	9 630	4.00	12 580	4.26	16 110	4.47	20 280	4.65	-	-	-	-	-
	40	3 100	3.56	4 540	4.08	6 320	4.57	8 480	5.04	11 070	5.46	14 150	5.85	17 780	6.19	21 990	6.48	-
	60	-	-	-	-	3 100	4.97	4 380	5.76	5 950	6.53	7 870	7.26	10 180	7.95	12 940	8.60	-
Max rpm	20	14 950	9.71	20 550	11.09	27 650	12.42	36 470	13.62	47 190	14.64	60 020	15.42	-	-	-	-	-
	40	9 100	10.23	13 060	11.98	18 020	13.87	24 160	15.83	31 690	17.79	40 800	19.70	51 700	21.50	64 590	23.12	-
	60	-	-	-	-	9 700	14.41	13 510	16.74	18 180	19.27	23 920	21.93	30 930	24.67	39 410	27.42	-

To: Evaporating temperature in °C
Superheat = 10 K

Tc: Condensing temperature in °C
Subcooling = 0 K

Qo: Cooling capacity in W

Pe: Power input in kW

Min rpm: Minimum rotation speed
Max rpm: Maximum rotation speed

Reciprocating compressors – variable speed

R407C

		To	-17.5		-15		-10		-5		0		5		10		15	
		Tc	Qo	Pe	Qo	Pe												
VTZ038																		
Min rpm	20	1 780	0.66	2 030	0.68	2 610	0.71	3 310	0.72	4 140	0.72	-	-	-	-	-	-	-
	40	1 150	0.76	1 340	0.82	1 790	0.93	2 330	1.01	2 980	1.08	3 730	1.13	4 620	1.17	5 640	1.20	
	60	-	-	-	-	-	-	1 390	1.18	1 840	1.34	2 390	1.48	3 030	1.61	3 780	1.73	
Max rpm	20	4 050	1.68	4 620	1.79	5 970	2.00	7 650	2.19	9 720	2.35	-	-	-	-	-	-	-
	40	2 780	1.91	3 260	2.06	4 360	2.37	5 700	2.68	7 350	2.98	9 360	3.26	11 790	3.51	14 700	3.73	
	60	-	-	-	-	-	-	3 580	2.98	4 760	3.40	6 230	3.81	8 020	4.21	10 210	4.59	
VTZ054																		
Min rpm	20	2 350	0.87	2 680	0.90	3 460	0.94	4 400	0.97	5 530	0.99	-	-	-	-	-	-	-
	40	1 590	1.06	1 850	1.13	2 460	1.26	3 190	1.36	4 080	1.44	5 150	1.51	6 400	1.56	7 870	1.60	
	60	-	-	-	-	-	-	1 910	1.65	2 520	1.86	3 270	2.04	4 170	2.20	5 250	2.33	
Max rpm	20	5 770	2.54	6 620	2.70	8 650	3.01	11 180	3.28	14 300	3.51	-	-	-	-	-	-	-
	40	4 080	2.81	4 740	3.05	6 290	3.53	8 220	4.01	10 590	4.48	13 490	4.93	17 000	5.33	21 180	5.69	
	60	-	-	-	-	-	-	5 410	4.26	7 080	4.93	9 140	5.62	11 670	6.29	14 740	6.96	
VTZ086																		
Min rpm	20	3 140	1.10	3 680	1.14	4 970	1.19	6 550	1.22	8 450	1.24	-	-	-	-	-	-	-
	40	1 800	1.36	2 180	1.47	3 050	1.66	4 100	1.81	5 350	1.93	6 850	2.02	8 610	2.09	10 670	2.14	
	60	-	-	-	-	-	-	2 390	2.13	3 270	2.45	4 280	2.71	5 440	2.93	6 790	3.12	
Max rpm	20	8 900	3.71	10 190	3.86	13 360	4.11	17 450	4.31	22 630	4.44	-	-	-	-	-	-	-
	40	6 700	4.48	7 660	4.72	9 910	5.19	12 710	5.65	16 230	6.07	20 650	6.45	26 130	6.76	32 830	7.00	
	60	-	-	-	-	-	-	8 910	6.66	11 330	7.35	14 270	8.03	17 900	8.69	22 400	9.31	
VTZ121																		
Min rpm	20	4 520	1.58	5 230	1.66	6 890	1.77	8 890	1.84	11 260	1.85	-	-	-	-	-	-	-
	40	2 990	1.96	3 550	2.11	4 830	2.39	6 370	2.62	8 200	2.80	10 360	2.94	12 890	3.02	15 820	3.04	
	60	-	-	-	-	-	-	4 070	3.23	5 370	3.58	6 910	3.89	8 740	4.15	10 890	4.35	
Max rpm	20	13 480	5.40	15 370	5.71	19 760	6.33	25 030	6.98	31 290	7.64	-	-	-	-	-	-	-
	40	9 440	6.08	10 940	6.48	14 430	7.28	18 690	8.09	23 800	8.92	29 860	9.77	36 960	10.64	45 210	11.52	
	60	-	-	-	-	-	-	12 430	9.03	16 140	10.13	20 670	11.23	26 120	12.35	32 570	13.49	
VTZ171																		
Min rpm	20	5 980	2.20	6 880	2.27	9 030	2.38	11 660	2.45	14 850	2.47	-	-	-	-	-	-	-
	40	4 150	2.83	4 890	3.00	6 630	3.31	8 760	3.59	11 350	3.84	14 460	4.03	18 140	4.19	22 460	4.28	
	60	-	-	-	-	-	-	5 310	4.38	7 120	4.93	9 340	5.44	12 040	5.92	15 290	6.34	
Max rpm	20	18 360	7.46	21 080	7.82	27 350	8.46	34 810	9.00	43 610	9.43	-	-	-	-	-	-	-
	40	13 130	8.82	15 560	9.47	21 090	10.71	27 620	11.87	35 290	12.95	44 230	13.96	54 570	14.89	66 440	15.73	
	60	-	-	-	-	-	-	18 270	13.52	24 250	15.29	31 300	17.01	39 550	18.67	49 150	20.29	
VTZ215																		
Min rpm	20	8 120	2.86	9 230	2.96	11 840	3.13	15 050	3.26	18 950	3.37	-	-	-	-	-	-	-
	40	5 820	3.70	6 760	3.93	8 930	4.34	11 550	4.70	14 730	5.00	18 540	5.26	23 070	5.47	28 430	5.64	
	60	-	-	-	-	-	-	7 390	5.87	9 680	6.54	12 480	7.14	15 870	7.68	19 930	8.15	
Max rpm	20	24 800	10.30	28 360	10.93	36 500	12.14	46 160	13.25	57 500	14.22	-	-	-	-	-	-	-
	40	17 530	11.38	20 580	12.27	27 520	14.11	35 690	15.96	45 260	17.81	56 390	19.60	69 250	21.30	84 000	22.87	
	60	-	-	-	-	-	-	24 100	17.85	31 600	20.42	40 380	23.06	50 610	25.73	62 450	28.40	
VTZ242																		
Min rpm	20	8 590	3.14	10 010	3.26	13 380	3.44	17 490	3.57	22 450	3.63	-	-	-	-	-	-	-
	40	5 950	3.89	7 030	4.14	9 570	4.59	12 670	5.00	16 420	5.35	20 900	5.65	26 180	5.89	32 360	6.06	
	60	-	-	-	-	-	-	8 430	6.25	11 020	6.97	14 150	7.64	17 900	8.26	22 360	8.82	
Max rpm	20	25 910	10.61	29 800	11.26	38 790	12.50	49 510	13.63	62 150	14.62	-	-	-	-	-	-	-
	40	18 310	11.71	21 550	12.65	28 870	14.52	37 510	16.37	47 620	18.15	59 390	19.84	72 980	21.41	88 590	22.84	
	60	-	-	-	-	-	-	25 460	18.18	33 080	20.70	41 910	23.20	52 140	25.66	63 940	28.05	

To: Evaporating temperature in °C
Superheat = 10 K

Tc: Condensing temperature in °C
Subcooling = 0 K

Qo: Cooling capacity in W

Pe: Power input in kW

Min rpm: Minimum rotation speed
Max rpm: Maximum rotation speed

Reciprocating compressors – variable speed

R134a

		To	-15		-10		-5		0		5		10		15	
		Tc	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe
VTZ038																
Min rpm	35	840	0.51	1 110	0.58	1 460	0.64	1 900	0.69	2 430	0.72	3 090	0.74	3 880	0.74	
	45	660	0.52	920	0.61	1 230	0.68	1 620	0.75	2 100	0.81	2 690	0.85	3 420	0.88	
	65	-	-	-	-	-	-	1 040	0.84	1 400	0.93	1 850	1.01	2 420	1.09	
Max rpm	35	2 340	1.37	3 130	1.54	4 110	1.69	5 340	1.81	6 850	1.90	8 700	1.97	10 930	2.00	
	45	1 860	1.41	2 560	1.63	3 440	1.83	4 530	2.00	5 890	2.15	7 560	2.27	9 580	2.35	
	65	-	-	-	-	-	-	2 920	2.23	3 930	2.48	5 200	2.71	6 780	2.92	
VTZ054																
Min rpm	35	1 280	0.71	1 720	0.79	2 250	0.86	2 880	0.93	3 620	1.00	4 490	1.06	5 490	1.11	
	45	1 050	0.74	1 440	0.84	1 910	0.93	2 470	1.03	3 140	1.12	3 910	1.20	4 800	1.28	
	65	-	-	-	-	-	-	1 670	1.18	2 170	1.31	2 750	1.45	3 430	1.59	
Max rpm	35	3 590	1.88	4 820	2.09	6 300	2.29	8 070	2.48	10 160	2.66	12 600	2.81	15 410	2.94	
	45	2 940	1.98	4 040	2.23	5 360	2.49	6 940	2.74	8 790	2.98	10 970	3.21	13 480	3.42	
	65	-	-	-	-	-	-	4 680	3.13	6 070	3.49	7 720	3.86	9 640	4.23	
VTZ086																
Min rpm	35	1 660	0.96	2 280	1.08	3 030	1.17	3 930	1.24	4 990	1.30	6 240	1.33	7 690	1.36	
	45	1 330	0.99	1 880	1.15	2 550	1.27	3 350	1.38	4 290	1.48	5 410	1.56	6 700	1.63	
	65	-	-	-	-	-	-	2 150	1.57	2 850	1.73	3 670	1.88	4 650	2.02	
Max rpm	35	5 430	2.99	7 440	3.38	9 900	3.67	12 860	3.88	16 380	4.03	20 500	4.12	25 300	4.17	
	45	4 370	3.06	6 170	3.56	8 350	3.98	10 970	4.32	14 080	4.61	17 740	4.84	22 000	5.04	
	65	-	-	-	-	-	-	7 050	4.90	9 340	5.37	12 050	5.80	15 230	6.22	
VTZ121																
Min rpm	35	2 620	1.33	3 360	1.46	4 250	1.59	5 330	1.71	6 610	1.83	8 130	1.93	9 900	2.02	
	45	2 240	1.44	2 900	1.61	3 710	1.78	4 690	1.93	5 860	2.08	7 240	2.23	8 860	2.36	
	65	-	-	-	-	-	-	3 190	2.29	4 070	2.53	5 130	2.76	6 400	2.99	
Max rpm	35	7 850	3.88	10 050	4.27	12 730	4.65	15 960	5.01	19 810	5.33	24 350	5.61	29 640	5.84	
	45	6 690	4.21	8 680	4.69	11 100	5.17	14 030	5.64	17 530	6.09	21 680	6.52	26 540	6.90	
	65	-	-	-	-	-	-	9 550	6.67	12 170	7.36	15 350	8.05	19 160	8.73	
VTZ171																
Min rpm	35	3 220	2.04	4 460	2.22	5 980	2.36	7 800	2.48	9 970	2.57	12 520	2.66	15 470	2.76	
	45	2 500	2.12	3 600	2.39	4 940	2.61	6 550	2.79	8 470	2.94	10 730	3.07	13 370	3.19	
	65	-	-	-	-	-	-	4 070	3.26	5 470	3.60	7 150	3.90	9 130	4.16	
Max rpm	35	11 120	6.17	15 050	7.09	19 760	7.89	25 350	8.55	31 900	9.05	39 520	9.39	48 310	9.54	
	45	8 810	6.21	12 420	7.31	16 730	8.35	21 830	9.32	27 830	10.20	34 820	10.99	42 900	11.66	
	65	-	-	-	-	-	-	14 050	10.01	18 690	11.25	24 160	12.53	30 570	13.83	
VTZ215																
Min rpm	35	4 680	2.68	6 190	2.94	8 010	3.17	10 160	3.38	12 690	3.60	15 630	3.84	19 030	4.11	
	45	3 880	2.84	5 260	3.19	6 910	3.49	8 860	3.75	11 160	4.01	13 830	4.26	16 930	4.52	
	65	-	-	-	-	-	-	6 000	4.34	7 770	4.79	9 850	5.20	12 290	5.58	
Max rpm	35	15 310	8.39	20 250	9.17	26 180	9.90	33 210	10.60	41 480	11.30	51 110	12.05	62 220	12.86	
	45	12 700	8.86	17 230	9.89	22 630	10.83	29 030	11.70	36 560	12.55	45 340	13.39	55 480	14.26	
	65	-	-	-	-	-	-	19 640	13.47	25 450	14.83	32 290	16.11	40 280	17.34	
VTZ242																
Min rpm	35	5 530	2.59	7 080	2.86	8 970	3.11	11 250	3.35	13 970	3.58	17 160	3.79	20 890	3.99	
	45	4 710	2.83	6 110	3.16	7 820	3.48	9 880	3.78	12 350	4.08	15 260	4.36	18 680	4.62	
	65	-	-	-	-	-	-	6 730	4.49	8 570	4.96	10 810	5.42	13 470	5.86	
Max rpm	35	16 550	7.61	21 180	8.40	26 840	9.15	33 670	9.84	41 810	10.49	51 420	11.08	62 640	11.60	
	45	14 120	8.30	18 300	9.28	23 410	10.23	29 590	11.14	36 980	11.99	45 740	12.80	56 020	13.55	
	65	-	-	-	-	-	-	20 170	13.15	25 710	14.50	32 410	15.81	40 430	17.08	

To: Evaporating temperature in °C
Superheat = 10 K

Tc: Condensing temperature in °C
Subcooling = 0 K

Qo: Cooling capacity in W

Pe: Power input in kW

Min rpm: Minimum rotation speed
Max rpm: Maximum rotation speed

Notes

A large grid of graph paper for taking notes, consisting of 20 columns and 30 rows of small squares.



The Danfoss product range for the refrigeration and air conditioning industry

Danfoss Refrigeration & Air Conditioning is a worldwide manufacturer with a leading position in industrial, commercial and supermarket refrigeration as well as air conditioning and climate solutions.

We focus on our core business of making quality products, components and systems that enhance performance and reduce total life cycle costs – the key to major savings.



Controls for Commercial Refrigeration



Controls for Industrial Refrigeration



Electronic Controls & Sensors



Industrial Automation



Household, light commercial and direct current compressors



Commercial Compressors



Condensing units



Thermostats



Heat exchangers

We offer a single source for one of the widest ranges of innovative refrigeration and air conditioning components and systems in the world. And, we back technical solutions with business solutions to help your company reduce costs, streamline processes and achieve your business goals.

Danfoss A/S · www.danfoss.com