

SCREWLINE³

Liquid chiller

Condenserless

Indoor installation

Capacity from 300 to 1427 kW

HYDRONIC



- ✓ Screw compressors and shell & tube evaporator
- ✓ Solution for cold climates in combination with remote condensers
- ✓ One or two independent circuits for high reliability
- ✓ Refrigerant R134a - GWP = 1430
- ✓ All sensitive components are protected against the atmospheric agents
- ✓ Two acoustic configurations: standard and super-silenced
- ✓ Modular operation management, up to 8 units in cascade
- ✓ Condensing temperature up to 65°C, low water temperature down to -8°C

functions and features



Cooling only



Remote condense



Indoor installation



R-134a



Semi-hermetic Twin-screw

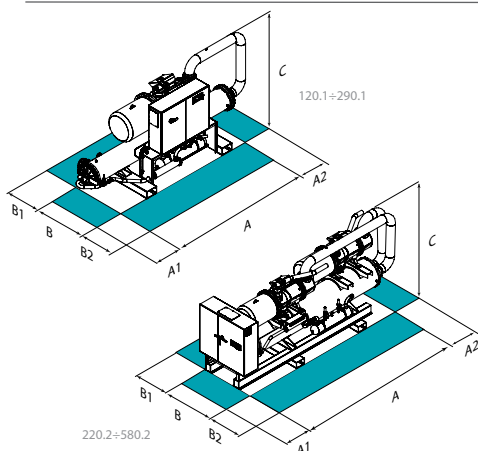


Electronic expansion valve



Intelligent

dimensions and clearances



CAUTION!

For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the green areas.

Size	►► MDE-SL3	120.1	140.1	160.1	180.1	200.1	220.1	250.1	270.1	290.1
A - Length	mm	4210	4210	4210	4189	4189	4189	4189	4324	4324
B - Width	mm	1350	1350	1350	1350	1350	1350	1350	1350	1350
ST-EXC C- Height	mm	1558	1558	1558	1642	1642	1642	1642	1657	1657
EN-EXC C- Height	mm	1573	1573	1573	1750	1750	1750	1750	1750	1750
A1	mm	700	700	700	700	700	700	700	700	700
A2	mm	700	700	700	700	700	700	700	700	700
B1	mm	1000	1000	1000	1000	1000	1000	1000	1000	1000
B2	mm	1160	1160	1160	1160	1160	1160	1160	1160	1160
ST-EXC Operating weight	kg	2073	2152	2229	2821	2832	2843	2895	2981	3012
EN-EXC Operating weight	kg	2237	2345	2422	3044	3055	3066	3118	3204	3235

Size	►► MDE-SL3	220.2	240.2	260.2	280.2	300.2	320.2	340.2	360.2	400.2	440.2	470.2	500.2	540.2	580.2
A - Length	mm	4638	4638	4638	4638	4638	4638	4992	4992	5006	5006	5006	5077	5077	5077
B - Width	mm	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350
ST-EXC C- Height	mm	1790	1790	1790	1790	1790	1790	1995	1995	2010	2010	2010	2145	2145	2145
EN-EXC C- Height	mm	1900	1900	1900	1900	1900	1900	2121	2121	2121	2121	2121	2239	2239	2239
A1	mm	1410	1410	1410	1410	1410	1410	1410	1410	1410	1410	1410	1410	1410	1410
A2	mm	700	700	700	700	700	700	700	700	700	700	700	700	700	700
B1	mm	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
B2	mm	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
ST-EXC Operating weight	kg	3390	3422	3497	3587	3681	3745	4448	4675	4763	4784	4832	5680	5817	5876
EN-EXC Operating weight	kg	3830	3862	3966	4013	4107	4171	5010	5267	5388	5445	5493	6318	6455	6514

The above mentioned data are referred to standard units for the constructive configurations indicated.
For all the other configurations, refer to the relative Technical Bulletin.

ST-EXC Standard (ST)-Excellence
EN-EXC Supersilenced (EN)-Excellence

versions and configurations

LOW TEMPERATURE:

- Low temperature: not required (Standard)
- B Water low temperature

VERSION:

- EXC Excellence (Standard)

ACOUSTIC CONFIGURATION:

- ST Standard acoustic configuration (Standard)
- EN Super-silenced acoustic configuration

UNIT INSTALLATION:

- II Indoor installation (Standard)

DOUBLE SET POINT:

- Double set point: not required (Standard)
- DSP Double set point

technical data

Size		►► MDE-SL3	120.1	140.1	160.1	180.1	200.1	220.1	250.1	270.1	290.1
ST/EN-EXC	♦ Cooling capacity	(1) kW	300	364	401	466	508	566	620	683	728
ST/EN-EXC	Compressor power input	(1) kW	69,1	82,4	90,5	105	114	128	140	154	165
ST/EN-EXC	Total power input	(1) kW	69,6	82,9	91,0	105	114	128	140	154	165
ST/EN-EXC	EER	(2) -	4,35	4,42	4,43	4,44	4,46	4,42	4,43	4,44	4,42
ST/EN-EXC	Refrigeration circuits	Nr	1								
ST/EN-EXC	No. of compressors	Nr	1								
ST/EN-EXC	Type of compressors	-	SCREW								
ST/EN-EXC	Refrigerant	-	R-134a								
ST/EN-EXC	Standard power supply	V	400/3~/50								
ST-EXC	Sound power level	(3) dB(A)	91	95	96	98	98	99	101	101	101
EN-EXC	Sound power level	(3) dB(A)	85	89	90	92	92	93	95	95	95

Size		►► MDE-SL3	220.2	240.2	260.2	280.2	300.2	320.2	340.2	360.2	400.2	440.2	470.2	500.2	540.2	580.2
ST/EN-EXC	♦ Cooling capacity	(1) kW	550	585	642	720	757	794	848	899	997	1115	1159	1231	1344	1427
ST/EN-EXC	Compressor power input	(1) kW	128	137	150	164	173	181	195	208	228	255	267	280	307	329
ST/EN-EXC	Total power input	(1) kW	128	138	151	165	174	182	196	209	228	256	268	281	308	329
ST/EN-EXC	EER	(2) -	4,30	4,26	4,27	4,38	4,37	4,39	4,34	4,31	4,38	4,37	4,34	4,39	4,38	4,34
ST/EN-EXC	Refrigeration circuits	Nr	2													
ST/EN-EXC	No. of compressors	Nr	2													
ST/EN-EXC	Type of compressors	-	SCREW													
ST/EN-EXC	Refrigerant	-	R-134a													
ST/EN-EXC	Standard power supply	V	400/3~/50													
ST-EXC	Sound power level	(3) dB(A)	94	94	96	99	99	99	100	101	102	103	104	104	105	105
EN-EXC	Sound power level	(3) dB(A)	88	88	91	93	93	93	94	95	96	98	98	98	99	99

The units are shipped with a sealed charge of nitrogen. (sizes 220.2-580.2)

(1) Data referred to the following conditions: Internal exchanger water = 12/7°C; Condensing temperature = 45°C

(2) EER referred only to compressors

(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.

accessories

- AMRX Rubber antivibration mounts
 - RCMRX Remote control via microprocessor control
 - PSX Mains power supply
 - CONTA2 Energy meter
 - CMSC9 Serial communication module for Modbus supervisor
 - CMSC10 Serial communication module for LonWorks supervisor
 - CMSC11 Serial communication module for BACnet-IP supervisor
 - SCPA Set-point compensation with 0-10 V signal
- SPC1 Set point compensation with 4-20 mA signal
 - SPC2 Set-point compensation with outdoor air temperature probe
 - ECS ECOSHARE function for the automatic management of a group of units
 - PFCP Power factor correction capacitors (cosfi > 0.9)
 - SFSTR2 Progressive compressor start-up device
 - CBS Overload circuit breakers
 - IOTX IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately