

# Technical Data Sheet

Compressor model **X18TNa**  
 Voltage **200-220/230V 50/60Hz ~1**  
 Refrigerant **R22**

APPLICATION		COMPRESSOR		MOTOR	
Application	High Back Pressure	Displacement	18,40 cm <sup>3</sup>	Nominal Power	3/4 hp
Refrigerant	R22	Diameter	34,93 mm	Voltage/Frequency	200-220V 50Hz
Evaporating Temp.	-15,0 °C to 10,0 °C	Stroke	19,20 mm	Voltage range	180-242 V
Expansion	Capillar/Valve	Net Weight	16,24 Kg	Type	CSR
Comp. Cooling	Fan cooled	Oil type	ISO VG 46 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	500 cm <sup>3</sup>	Locked Rotor Amps (LRA)	31,50 A
				Max. Cont. Current (MCC)	10,50 A
				Main W. resist. at 25°C	2,34 Ω
				Start W. resist. at 25°C	7,22 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	2.075 kCal/h	2.077 W
COP	2,40 W/W	2,10 W/W
EER	2,06 kCal/Wh	1,81 kCal/Wh
Input Power	1.005 W	990 W
Current	6,00 A	5,89 A

## APPROVALS

## TEST CYCLE CONDITIONS

	ASHRAE HBP (D)	CECOMAF HBP (C)
Evaporating temp. (T <sub>e</sub> )	7,2 °C	5,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	46,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	35,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	35,0 °C	32,0 °C
Voltage/Frequency	200 V 50 Hz	200 V 50 Hz

## ELECTRICAL COMPONENTS

Starting capacitor	88-108 μF 330 V			
Run capacitor	20 μF 420 V			
Relay	Option 1			
Reference	2014 180. + NTC15Ω			
Pick-Up	16.70 A			
Drop-Out	14.00 A			
Protector	Option 1			
Reference	T0257			
Current	24,00 A			
Time check	6,0-16 seg			
Disc temp. (Open/Close)	120,00 / 52,00 °C			

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	1.097	658	4,45	1,94	1,67
40	-10	1.398	716	4,58	2,27	1,95
40	-5	1.723	768	4,73	2,61	2,24
40	0	2.071	812	4,90	2,97	2,55
40	5	2.444	849	5,06	3,35	2,88
40	7,2	2.615	863	5,13	3,53	3,03
40	10	2.840	878	5,21	3,76	3,23

45	-15	1.008	680	4,49	1,72	1,48
45	-10	1.289	744	4,66	2,01	1,73
45	-5	1.593	801	4,86	2,31	1,99
45	0	1.921	851	5,07	2,62	2,26
45	5	2.273	894	5,29	2,96	2,54
45	7,2	2.435	910	5,38	3,11	2,68
45	10	2.648	929	5,49	3,32	2,85

50	-15	919	703	4,54	1,52	1,31
50	-10	1.179	773	4,75	1,78	1,53
50	-5	1.463	835	5,00	2,04	1,75
50	0	1.770	891	5,27	2,31	1,99
50	5	2.102	939	5,55	2,60	2,24
50	7,2	2.255	958	5,67	2,74	2,36
50	10	2.457	979	5,82	2,92	2,51

55	-15	830	725	4,60	1,33	1,14
55	-10	1.070	801	4,85	1,55	1,34
55	-5	1.333	869	5,16	1,78	1,53
55	0	1.620	930	5,50	2,03	1,74
55	5	1.931	984	5,85	2,28	1,96
55	7,2	2.075	1.005	6,00	2,40	2,06
55	10	2.265	1.030	6,19	2,56	2,20

60	-15	741	748	4,67	1,15	0,99
60	-10	960	829	4,97	1,35	1,16
60	-5	1.203	903	5,34	1,55	1,33
60	0	1.470	969	5,75	1,76	1,52
60	5	1.760	1.029	6,18	1,99	1,71
60	7,2	1.895	1.053	6,36	2,09	1,80
60	10	2.074	1.081	6,60	2,23	1,92

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	1.198	661	4,46	1,81	1,57
40	-10	1.528	720	4,59	2,12	1,83
40	-5	1.883	772	4,75	2,44	2,11
40	0	2.264	817	4,92	2,77	2,39
40	5	2.669	854	5,09	3,12	2,70
40	7,2	2.856	868	5,16	3,29	2,84
40	10	3.100	884	5,24	3,51	3,03

45	-15	1.097	684	4,50	1,60	1,39
45	-10	1.403	749	4,67	1,87	1,62
45	-5	1.734	806	4,87	2,15	1,86
45	0	2.090	857	5,10	2,44	2,11
45	5	2.472	900	5,32	2,75	2,37
45	7,2	2.647	916	5,42	2,89	2,50
45	10	2.878	935	5,53	3,08	2,66

50	-15	995	706	4,55	1,41	1,22
50	-10	1.277	777	4,76	1,64	1,42
50	-5	1.584	840	5,02	1,89	1,63
50	0	1.917	896	5,30	2,14	1,85
50	5	2.274	945	5,59	2,41	2,08
50	7,2	2.439	964	5,71	2,53	2,19
50	10	2.657	986	5,87	2,69	2,33

55	-15	894	729	4,61	1,23	1,06
55	-10	1.152	805	4,87	1,43	1,24
55	-5	1.435	874	5,19	1,64	1,42
55	0	1.743	936	5,54	1,86	1,61
55	5	2.077	990	5,89	2,10	1,81
55	7,2	2.231	1.012	6,05	2,21	1,91
55	10	2.435	1.037	6,24	2,35	2,03

60	-15	792	752	4,68	1,05	0,91
60	-10	1.026	834	4,99	1,23	1,06
60	-5	1.285	908	5,37	1,42	1,22
60	0	1.569	975	5,79	1,61	1,39
60	5	1.879	1.035	6,23	1,81	1,57
60	7,2	2.023	1.060	6,42	1,91	1,65
60	10	2.214	1.088	6,66	2,03	1,76

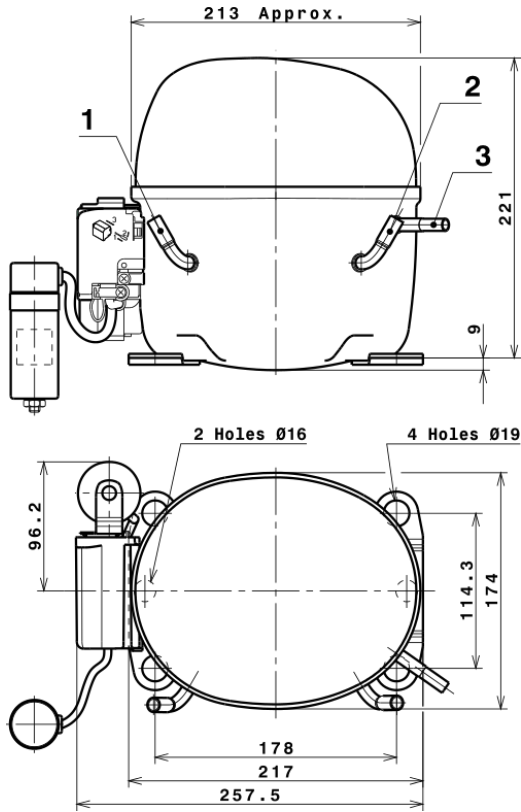
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	3.696,2481464322	512,6234521318	2,8873210718	64,733769465871
2	119,2275643221	-0,7327697383	-0,0646834732	2,1702701719035
3	-35,6435342442	8,1546982351	0,0510749346	-0,41601522762726
4	0,5189108521	-0,1417112076	0,0005216805	0,016302295241422
5	-0,9989620112	0,2347062496	0,0025714335	-0,0096710672124979

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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# Technical Data Sheet

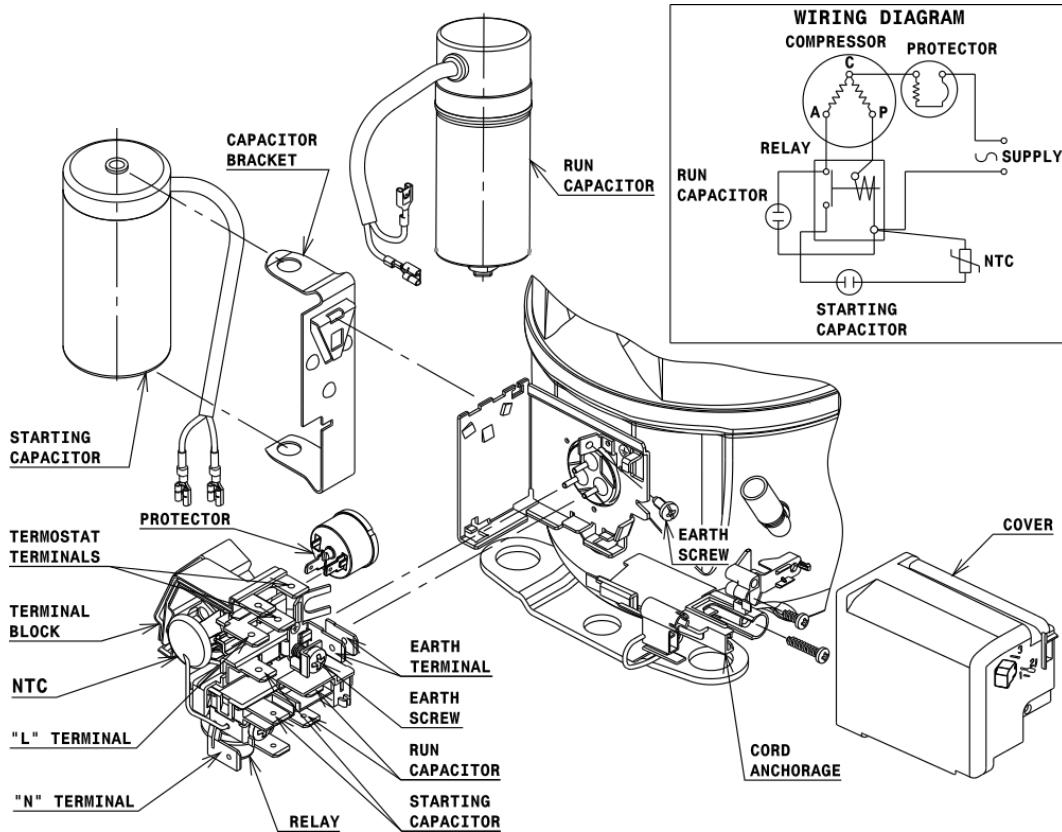
## COMPRESSOR DIMENSIONS



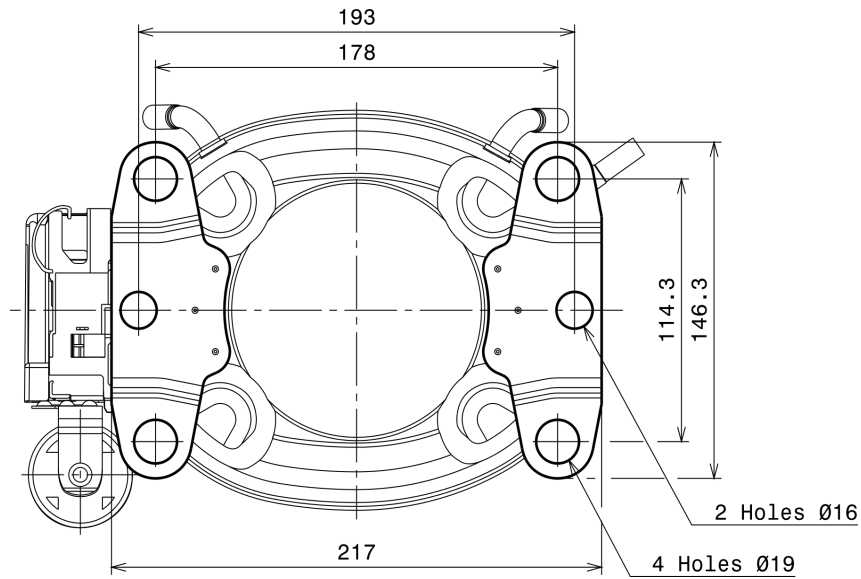
DESIGNATION	INTERNAL DIAM.
1 Service	9,7 mm
2 Suction	9,7 mm
3 Discharge	6,5 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSR CONNECTION (CURRENT RELAY + NTC) (X range)



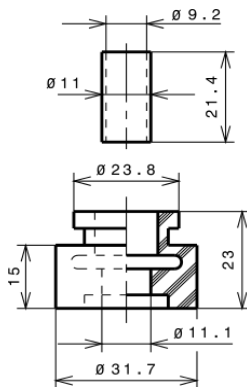
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

$\varnothing 19$  holes (178x114.3 net)



## SOA

SOA R22 HBP

