

Refridgeration dryers

SMARD M SERIES - MARINE APPLICATION

BENEFITS AND FEATURES

- Corrosion-free air circuit, made of copper and stainless steel
- Powder-coated housing
- Halogen-free cables
- Potential-free alarm contact



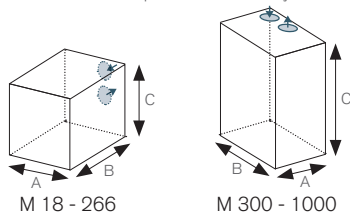
Technical Data	18 - 83	98 - 266	300 - 1000
Inlet / Outlet	On rear		Flanges top position
Bypass	-		-
Refrigerant	R134a		R407A
Air cooling	●		-
Water cooling	-		●
Heat Exchanger	Stainless steel plate		Stainless steel plate
IP rating	IP 44		IP 44
Dew point indication	Colour change	LED	Digital
Potential free alarm contact	●		●
Time-controlled condensate drain	●		●
Electronic level-controlled drain	○		○

General Data	
Medium	Compressed Air
Housing	Steel
Colour - Panels	M 18 - M 266 7,5 BG 7/2 (Munsell), M 300 - M 1000: RAL 7016 (Anthracite-grey)
Location	Indoors

Model	Flow Rate*	Connection	Dimensions			Weight	el. Connection	Power Consumption
			A	B	C			
	m ³ /h		mm			kg	V/Ph/Hz	kW
Smard M 18	37	3/4"	394	368	568	30	230/1/60	0.34
Smard M 50	92		483	526	510	42		0.55
Smard M 60	111	1"	336	763	525	46		0.60
Smard M 83	154					51		0.65
Smard M 98	182					55		1.20
Smard M 133	246	1 1/2"	440	917	718	73		1.50
Smard M 166	308					86		2.00
Smard M 201	372					95		2.70
Smard M 266	492	2"	520	966	760	95		

Smard M 300	1,000	DN 80	1,190	869	1,942	560	400/3/50 460/3/60	3.40
Smard M 400	1,200					580		3.70
Smard M 500	1,500					600		4.90
Smard M 600	1,800					890		5.50
Smard M 700	2,400					980		7.20
Smard M 900	3,000	DN 100	1,213	1,369	1,050	8.90		
Smard M 1000	3,200				1,050	9.20		

* ISO 7183, based on the intake volume of the compressor at +20°C and 1 bar (a), operating pressure 7 bar (g), inlet temperature +45°C, ambient temperature +45°C, pressure dew point +3°C
 Technical data and specification are subject to change without prior notice



Design Data*	Min.	Nom.	Max.
Operating pressure	3 bar (g)	7 bar (g)	16 bar (g)
Inlet temperature	+4 °C	+45 °C	+55 °C
Ambient temperature	+4 °C	+45 °C	+50 °C

* The following correction factors need to be used to select the correct unit for other operating conditions.
 Deltech® refrigerant compressed air dryers are best used with a Deltech® PF pre-filter and a HF after-filter.

Correction factors for different operating pressures in bar (g) (F ₁)												
bar (g)	3	4	5	6	7	8	9	10	11	12	13	14
Smard M 18 - 266	0.72	0.85	0.92	0.96	1.00	1.04	1.10	1.13	1.15	1.18	1.21	1.24
Smard M 300 - 1000	-	-	0.91	0.95	1.00	1.03	1.09	1.11	1.14	1.17	1.20	-

Correction factors for different inlet temperatures in °C (F ₂)			
°C	+45 °C	+50 °C	+55 °C
Smard M 18 - 266	1.00	0.89	0.61
Smard M 300 - 1000	1.00	0.89	0.60

Selection example	Calculation
Compressor capacity (V ₁)	$V_2 = \frac{V_1}{F_1 \cdot F_2 \cdot F_3} = \frac{900}{0.95 \cdot 0.89 \cdot 1} = 1,064 \text{ m}^3/\text{h}$
Operating pressure (F ₁)	
Inlet temperature (F ₂)	
Ambient temperature (F ₃)	
V ₂	
	Required dryer capacity
	Selection: Smard M 400

Correction factors for different ambient temperatures in °C (F ₃)		
°C	+45 °C	+50 °C
Smard M 18 - 266	1.00	0.94
Smard M 300 - 1000	1.00	1.00

Distributed by
 FLAK Industritrykluft
 Industrivej 4
 DK-8981 Spentrup
 Te. 87 82 83 00
 e-mail: info@flak.dk

www.flak.dk