



# HRO 400-7C 03.29 RT

## COOLING AND HEATING PERFORMANCES

EWT (°C)	Water Flow (l/s)	COOLING Entering air : 25°C : 50 % RH						HEATING Entering air : 19°C			
		COOLING (W)		COMP (W)	THR (W)	Sensible / total	EF	HEATING (W)	COMP (W)	THA (W)	COP
		Total	Sensible								
13	0.044	3145	2730	550	3725	0.87	4.95				
15	0.044	3040	2690	565	3635	0.88	4.68				
16	0.164							3820	620	3120	4.96
	0.125							3640	600	2960	4.85
	0.078							3390	565	2745	4.74
18	0.164							3990	630	3280	5.12
	0.125							3755	605	3070	4.97
	0.078							3520	580	2860	4.82
20	0.164	3280	2780	530	3840	0.85	5.33	4085	635	3370	5.20
	0.125	3200	2750	540	3770	0.86	5.12	3880	615	3185	5.07
	0.078	3115	2710	575	3720	0.87	4.72	3665	590	2995	4.95
25	0.164	3130	2720	570	3730	0.87	4.78	4440	640	3720	5.62
	0.125	3065	2695	585	3680	0.88	4.57	4245	630	3535	5.44
	0.078	2850	2565	610	3490	0.90	4.10	4030	620	3330	5.23
27	0.164	3070	2700	590	3690	0.88	4.55	4525	645	3800	5.69
	0.125	2965	2660	605	3600	0.90	4.30	4335	640	3615	5.49
	0.078	2735	2490	630	3395	0.91	3.83	4165	630	3455	5.34
31	0.164	2895	2605	635	3560	0.90	4.02	4590	655	3855	5.70
	0.125	2795	2570	660	3485	0.92	3.75	4400	650	3670	5.50
	0.078	2530	2350	680	3240	0.93	3.31	4275	645	3550	5.38
35	0.164	2640	2400	680	3350	0.91	3.45				
	0.125	2545	2365	695	3270	0.93	3.26				
	0.078	2320	2180	730	3080	0.94	2.85				
38	0.164	2480	2280	715	3225	0.92	3.10				
	0.125	2405	2260	730	3165	0.94	2.95				
	0.078	2170	2060	760	2960	0.95	2.57				
40	0.164	2365	2200	740	3135	0.93	2.87				
	0.125	2290	2175	760	3080	0.95	2.71				
	0.078	2040	1960	790	2860	0.96	2.33				
43	0.164	2205	2070	765	3000	0.94	2.59				
	0.125	2115	2030	800	2945	0.96	2.39				
	0.078	1910	1850	825	2765	0.97	2.10				
46	0.164	2020	1920	810	2860	0.95	2.26				
	0.125	1950	1890	835	2815	0.97	2.12				
	0.078	1745	1710	870	2645	0.98	1.83				
48	0.164	1905	1830	845	2780	0.96	2.05				
	0.125	1825	1790	860	2715	0.98	1.93				
	0.078	1635	1635	905	2570	1.00	1.65				
50											

All performances quoted at nominal air flow [Medium]

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**COOLING CORRECTION FACTORS**

**DT 0246 GB**

EWT °C	EAT % RH	TOTAL COOLING EAT : 25°C	SENSIBLE COOLING EAT					COMP W	RTHR EAT : 25°C
			22°C	23°C	24°C	25°C	26°C		
			20	40	0.965	0.922	0.961		
to	50	1.000	0.922	0.961	0.967	1.000	1.033	1.000	1.000
35	60	1.080	0.872	0.901	0.931	0.961	0.994	1.026	1.069
36	40	1.000	0.852	0.902	0.949	1.000	1.047	1.000	1.000
to	50	1.000	0.852	0.902	0.949	1.000	1.047	1.000	1.000
48	60	1.026	0.852	0.902	0.945	0.969	1.012	1.031	1.027

**HEATING CORRECTION FACTORS \***

EAT (°C)	18	19	20	21
HEATING	1.035	1.000	0.965	0.932

**Water Pressure Drop [Nominal in Bold]**

Flow Rate (l/s)	0.1	<b>0.15</b>	0.211
Δ P [kPa]	1.57	<b>3.43</b>	6.37

**AIR FLOW [m3/h] AGAINST EXTERNAL RESISTANCE**

Speed	External Static [Pa]							Nominal		
	0	19.6	39.2	58.8	78.4	98	117.6	68.6	93.1	122.5
Low	840	820	800	760	720	680	640	750		
Medium	1080	1050	1020	980	940	890	840		<b>900</b>	
High	1350	1300	1250	1200	1150	1100	1050			1000

Nominal Flow in Bold

**AIR FLOW CORRECTION FACTORS**

Air Flow %	80	90	100	110	120	130	Low	Medium	High
Heating	0.882	0.946	1.000	1.045	1.082	1.113	0.915	1.000	1.049
Total Cooling	0.865	0.937	1.000	1.057	1.097	1.120	0.891	1.000	1.063
Sensible Cooling	0.747	0.867	1.000	1.073	1.114	1.138	0.784	1.000	1.080

**ELECTRICAL**

Voltage	Phase	Fan Amps			Compressor Amps		Fan Abs Pwr (W)			Max Abs Pwr	Fuse Rating (A)
		low	medium	high	F/L	Start	low	medium	high		
230	1	0.90	1.10	1.35	4	24	185	230	290	2050	10

**INSTALLATION**

Supply Cable Size	Mains Connection
3 Core 2.5mm	Fused Switched Spur

\* Based on Nominal Water Flow

\*\* With Clean Filter