

Small UP - Total Air System

CCN: 23753734
 Rev.: G CN 1272434
 Ref.: 9902
 Page: 602
 Date: 10th Nov 2017
 Cancels: 15th June 2017

Point of Manufacture - Campbellsville, USA

60 HERTZ ENGINEERING DATA

Model	UP6-7TAS-125	UP6-7TAS-150	UP6-7TAS-210
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GENERAL COMPRESSOR DATA

Capacity (Ref. Intake Condition.) FAD ⁽¹⁾	m ³ /min (cfm)	0.74 (26.3)	0.65 (23.1)	0.45 (16)
Maximum & Rated Operating Pressure	barg (psig)	8.6 (125)	10.3 (150)	14.5 (210)
Rated package discharge Pressure ⁽¹³⁾	barg (psig)	8.0 (116)	9.9 (143)	14.1 (205)
Minimum Operating Pressure	barg (psig)	4.5 (65)	4.5 (65)	4.5 (65)
Maximum Operating Temperature	°C (°F)	40 (105)	40 (105)	40 (105)
Minimum Operating Temperature	°C (°F)	2 (36)	2 (36)	2 (36)

SOUND LEVEL (2)

Base mounted Enclosed	dB(A)	65	65	65
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COOLING DATA

Air-cooled (Ambient Temperature 40°C/104°F)

Coolant Discharge temperature	°C(°F)	87 (189)	86 (187)	90 (194)
A/E Injection Temperature	°C(°F)	79 (174)	79 (174)	79 (174)
(3) Aftercooler - Inlet	°C(°F)	79 (174)	79 (174)	79 (174)
Aftercooler - Outlet	°C(°F)	51 (124)	51 (124)	51 (124)
Heat Removal Oil Cooler	kW (1000 Btu/hr)	5.5 (18.8)	5.5 (18.8)	5.5 (18.8)
Heat Removal Oil and Aftercooler	kW (1000 Btu/hr)	6.1 (20.8)	6.1 (20.8)	6.1 (20.8)
Heat Removal Dryer Condenser (Max)	kW (1000 Btu/hr)	1.4 (4.8)	1.4 (4.8)	1.4 (4.8)
Coolant Flow	lpm (UK gpm)	17.0 (3.7)	21.0 (4.6)	32.0 (7.0)
Cooling Air				
Main Cooling Air Flow	m ³ /min (cfm)	20.0 (700)	20.0 (700)	16.0 (565)
Dryer Cooling Airflow	m ³ /min (cfm)	Included	Included	
Cooling Air CTD	°C (°F)	35 (63)	35 (63)	35 (63)
Aftercooler CTD (3)	°C (°F)	11 (20)	11 (20)	11 (20)

CONSTRUCTION FOUNDATION AND

PIPING CONNECTIONS

Air Discharge Base Mount	Inches BSPT (9)	0.75		
Air Discharge from ASME Receiver	Inches NPT	0.75		
Package Automatic Condensate Drain	Inches NPT	0.25		
Coolant Drain	Drain Plug	9/16"-SAE		
Power Inlet (Main)	Inch	1"		
Power Inlet (Dryer)	Inch	1/2"		

COOLANT LUBRICATION DATA

Coolant Sump Capacity	litres (US gal)	3 (.8)		
Total coolant fill capacity	litres (US gal)	4.5 (1.2)		

DIMENSIONS

		Basemount	80 gal	120 gal
length, width, height	mm	1040/728/936	1783/737/1513	1900/737/1616
	Inches	40.9/28.7/36.9	70.2/29.0/59.6	74.8/29.0/63.7
GA Drawing Numbers		22431811	24470304	22469191

SHIPPING DATA - NET WEIGHTS

		Basemount	80 gal	120 gal
Total Air System package	kg (lb.)	331 (730)	466 (1005)	463 (1021)

SSR
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Model	UP6-7TAS-125	UP6-7TAS-150	UP6-7TAS-210																				
Compressor Module Data																							
Rotor Diameter (male)	mm	74.25	74.25																				
Male Rotor Speed	rpm	3200	2850																				
Tip Speed	m/sec	12.44	11.08																				
Power Data																							
Applied main motor power ⁽⁸⁾	HP	8.2	8.2																				
Applied Power - Fan	HP	Included	Included																				
Applied Power - Dryer compressor	HP	0.6	0.6																				
Applied Power - Dryer Fan	HP	Included	Included																				
Applied Power - Full Package ⁽⁸⁾	HP	8.8	8.8																				
ELECTRICAL DATA - ALL UNITS SSR UP6-7																							
*** NOTE BLUE SHADE DENOTES SINGLE PHASE ***																							
Nominal Current - Main Drive Motor ⁽⁹⁾ ODP	Amps	31.0	20.0	17.8	10.5	8.9	7.5																
Maximum Applied Power - TAS Package ⁽¹⁰⁾ ODP	Amps	34.1	22.0	19.6	11.6	9.8	8.3																
Starting current -- Direct on Line	Amps	217.0	155.0	135.0	82.0	67.0	54.0																
Starting current -- Star Delta Start	Amps	N/A	N/A	N/A	N/A	N/A	N/A																
Main Motor Data																							
Nominal Power - Main Driver	HP	7.5	7.5	7.5	7.5	7.5	7.5																
Drive Motor enclosure Protection		TEFC	ODP	ODP	ODP	ODP	ODP																
Drive Motor RPM		3495	3510	3510	3510	3510	3510																
Drive Motor Frame		184T	184TZ	184TZ	184TZ	184TZ	184TZ																
Drive Motor Locked Rotor DOL ⁽⁵⁾	Amps	217.0	159.0	145.0	84.0	73.0	60.0																
Drive Motor Efficiency ⁽⁸⁾		84	88.5	88.5	88.5	88.5	88.5																
Drive Motor Power Factor ⁽⁸⁾		0.92	0.90	0.90	0.90	0.90	0.90																
Test Certificate Number ⁽⁴⁾		BL650710	FD-2016-023195	FD-2016-170821	FDC 086582.2017	FD-2016-170821	FD-2016-171653																
Dryer Electrical Data																							
Full Load Current	Amps	5																					
Starting Current	Amps	30																					
Electrical Installation -- Total Air System																							
Recommended wire size - Main motor - ⁽⁶⁾	Awg	6	8	10	12	14	14																
Suggested Fuse Rating ⁽⁷⁾	Amps	50	35	35	20	15	12																
Recommended wire size - Dryer - ⁽⁶⁾	Awg	18																					
Refrigerated Dryer Data																							
Pressure Dew Point ISO Class ⁽¹¹⁾	°C (°F)	5	lower than 7°C (44°F)																				
Refrigerant weight of R-134a	Grams / (Oz)		350/(12.7)																				
Filter Data																							
Primary filter detail - at 21°C (70°F)		<table border="1"> <tr><th colspan="2">Particulate</th></tr> <tr><th>ISO Class</th><th>Filtration</th></tr> <tr><td>3</td><td>1 micron</td></tr> <tr><td>2</td><td>0.01 micron</td></tr> </table>		Particulate		ISO Class	Filtration	3	1 micron	2	0.01 micron	<table border="1"> <tr><th colspan="2">Liquid</th></tr> <tr><th>ISO Class</th><th>Filtration</th></tr> <tr><td>3</td><td>0.6 mg/m³ (0.5 ppm)</td></tr> <tr><td>1</td><td>0.01 mg/m³ (0.01 ppm)</td></tr> </table>		Liquid		ISO Class	Filtration	3	0.6 mg/m ³ (0.5 ppm)	1	0.01 mg/m ³ (0.01 ppm)		
Particulate																							
ISO Class	Filtration																						
3	1 micron																						
2	0.01 micron																						
Liquid																							
ISO Class	Filtration																						
3	0.6 mg/m ³ (0.5 ppm)																						
1	0.01 mg/m ³ (0.01 ppm)																						
Final filter detail - at 21°C (70°F)																							
Pressure Drop data by operating pressure																							
	barG / (psig)	8.6	125	10.3	150	14.5	210																
Dryer Pressure Drop	barG / (psig)	0.28	4	0.21	3	0.14	2																
Primary filter wet pressure drop	barG / (psig)	0.14	2	0.10	1.5	0.07	1																
Final filter wet pressure drop	barG / (psig)	0.21	3	0.14	2	0.10	1.5																
Total Pressure Drop ⁽¹⁰⁾ For ISO Class 2.5.1 air	barG / (psig)	0.62	9	0.45	6.5	0.31	4.5																

Notes :

- (1) FAD (Free Air Delivery) is full package performance including all losses. Tested in accordance with ISO 1217 : 1996 Annex C.
- (2) Measured in free field conditions in accordance with PNEURO/CAGI test codes PN8NTC2.3, with +/- 3 dB(A) tolerance.
- (3) 40% Relative Humidity Inlet Air (For alternate conditions refer to SSR toolbox or contact IR)
- (4) Motor test certificate
- (5) Inrush amps
- (6) This is a minimum requirement based on 90°C wire - It may be necessary to use larger cables to comply with local regulations or if the voltage drop exceeds 5% of the nominal voltage.
- (7) Recommended Time delay Fuse. Refer to local code for proper fuse sizing
- (8) Measured at rated compressor duty
- (9) Installation kit will provide flexible connection to NPT or BSPT
- (10) Total Air System package including compressor, integral dryer with pre and final compressed air filters
- (11) Dew point measured in accordance with ISO 8573-1:2001. With inlet air to package of 25°C (77 °F) and RH at 60%
- (13) Discharge pressure when operating at compressor rated pressure, with clean wetted filters