

Small UP - Total Air System

CCN: 23753742  
 Rev.: G CN 1272434  
 Ref.: 9902  
 Page: 604  
 Date: 10th Nov 2017  
 Cancels: 15th June 2017

Point of Manufacture - Campbellsville, USA

60 HERTZ ENGINEERING DATA

Model	UP6-10TAS-125	UP6-10TAS-150	UP6-10TAS-210
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**GENERAL COMPRESSOR DATA**

Capacity (Ref. Intake Condition.) FAD <sup>(1)</sup>	m <sup>3</sup> /min (cfm)	1.02 (36.1)	0.91 (32.3)	0.64 (22.8)
Maximum & Rated Operating Pressure	barg (psig)	8.6 (125)	10.3 (150)	14.5 (210)
Rated package discharge Pressure <sup>(13)</sup>	barg (psig)	8.2 (119)	9.96 (145)	14.3 (207)
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)	68	68	68
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**COOLING DATA**

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

Coolant Discharge temperature	°C(°F)	85 (185)	85 (185)	90 (194)
A/E Injection Temperature	°C(°F)	76 (169)	76 (169)	77 (171)
(3) Aftercooler - Inlet	°C(°F)	77 (171)	77 (171)	77 (171)
Aftercooler - Outlet	°C(°F)	51 (124)	51 (124)	51 (124)
Heat Removal Oil Cooler	kW (1000 Btu/hr)	7 (23.9)	7 (23.9)	7 (23.9)
Heat Removal Oil and Aftercooler	kW (1000 Btu/hr)	8.2 (28.0)	8.2 (28.0)	8.2 (28.0)
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)
<b>Cooling Air</b>				
Main Cooling Air Flow	m <sup>3</sup> /min (cfm)	28.0 (1000)	28.0 (1000)	25.0 (880)
Dryer Cooling Airflow	m <sup>3</sup> /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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**60 HERTZ ENGINEERING DATA**

Model	UP6-10TAS-125	UP6-10TAS-150	UP6-10TAS-210																		
<b>Compressor Module Data</b>																					
Rotor Diameter ( male )	mm	74.25	74.25																		
Male Rotor Speed	rpm	4300	3950																		
Tip Speed	m/sec	16.72	15.36																		
<b>Power Data</b>																					
Applied main motor power <sup>(8)</sup>	HP	11.0	11.0																		
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 <sup>(8)</sup>	HP	11.6	11.6																		
<b>ELECTRICAL DATA - ALL UNITS SSR UP6-10</b>																					
*** NOTE BLUE SHADE DENOTES SINGLE PHASE ***																					
Nominal Current - Main Drive Motor <sup>(9)</sup> ODP/TEFC	Amps	27.5	24.0	14.5	12.0	9.6															
Maximum Applied Power - TAS Package <sup>(10)</sup> ODP/TEFC	Amps	30.3	26.4	15.9	13.2	10.6															
Starting current -- Direct on Line	Amps	189.0	165.0	100.0	83.0	66.0															
Starting current -- Star Delta Start	Amps	N/A	N/A	N/A	N/A	N/A															
<b>Main Motor Data</b>																					
Nominal Power - Main Driver	HP	10.0	10.0	10.0	10.0	10.0															
Drive Motor enclosure Protection		ODP	ODP	ODP	ODP	ODP															
Drive Motor RPM		3540	3540	3540	3540	3540															
Drive Motor Frame		213TZ/215TZ	213TZ/215TZ	213TZ/215TZ	213TZ/215TZ	213TZ/215TZ															
Drive Motor Locked Rotor DOL/(S/D) <sup>(5)</sup>	Amps	190.0	163.0	100.0	81.5	68.2															
Drive Motor Efficiency <sup>(8)</sup>		89.5	89.5	89.5	89.5	89.5															
Drive Motor Power Factor <sup>(8)</sup>		0.9	0.9	0.9	0.9	0.9															
Test Certificate Number <sup>(4)</sup>		FD-2016-163958	FD-2016-171468	FDC 086606.2017	FD-2016-171468	FD-2016-16382															
<b>Dryer Electrical Data</b>																					
Full Load Current	Amps	5																			
Starting Current	Amps	30																			
<b>Electrical Installation -- Total Air System</b>																					
Recommended wire size - Main motor - <sup>(6)</sup>	Awg	8	8	10	12	14															
Suggested Fuse Rating <sup>(7)</sup>	Amps	50	45	25	20	15															
Recommended wire size - Dryer - <sup>(6)</sup>	Awg	18																			
<b>Refrigerated Dryer Data</b>																					
Pressure Dew Point ISO Class <sup>(11)</sup>	°C (°F)	5	lower than 7°C (44°F)																		
Refrigerant weight of R-134a	Grams / (Oz)		350/(12.7)																		
<b>Filter Data</b>																					
Primary filter detail - at 21°C ( 70°F )		<table border="1"> <thead> <tr> <th colspan="2">Particulate</th> <th colspan="2">Liquid</th> </tr> <tr> <th>ISO Class</th> <th>Filtration</th> <th>ISO Class</th> <th>Filtration</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>1 micron</td> <td>3</td> <td>0.6 mg/m<sup>3</sup> (0.5 ppm)</td> </tr> <tr> <td>2</td> <td>0.01 micron</td> <td>1</td> <td>0.01 mg/m<sup>3</sup> (0.01 ppm)</td> </tr> </tbody> </table>		Particulate		Liquid		ISO Class	Filtration	ISO Class	Filtration	3	1 micron	3	0.6 mg/m <sup>3</sup> (0.5 ppm)	2	0.01 micron	1	0.01 mg/m <sup>3</sup> (0.01 ppm)		
Particulate		Liquid																			
ISO Class	Filtration	ISO Class	Filtration																		
3	1 micron	3	0.6 mg/m <sup>3</sup> (0.5 ppm)																		
2	0.01 micron	1	0.01 mg/m <sup>3</sup> (0.01 ppm)																		
Final filter detail - at 21°C ( 70°F )																					
<b>Pressure Drop data by operating pressure</b>																					
	barG / (psig)	barG	psig	barG	psig	barG	psig														
Dryer Pressure Drop		8.6	125	10.3	150	14.5	210														
Primary filter wet pressure drop	barG / (psig)	0.17	2.5	0.17	2.5	0.10	1.5														
Final filter wet pressure drop	barG / (psig)	0.10	1.5	0.07	1	0.03	0.5														
Total Pressure Drop <sup>(10)</sup> For ISO Class 2.5.1 air	barG / (psig)	0.14	2	0.10	1.5	0.07	1														
		0.41	6	0.34	5	0.21	3														

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 PNEUROP/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