

ENGINEERING MANUAL

SSR Small UP SERIES



CCN: 23753643
 Rev.: G CN 1272434
 Ref.: 9902
 Page: 100
 Date: 10th Nov 2017
 Cancels: 15th June 2017

Point of Manufacture - Campbellsville, USA

60 HERTZ ENGINEERING DATA

Model		UP6-5-125	UP6-5-150	
GENERAL COMPRESSOR DATA				
Capacity (Ref. Intake Cond.) FAD (1)	m ³ /min (cfm)	0.42 (14.9)	0.36 (12.9)	
Maximum Operating Pressure	barg (psig)	8.6 (125)	10.3 (150)	
Minimum Operating Pressure	barg (psig)	4.5 (65)	4.5 (65)	
Maximum Operating Temperature	°C (°F)	40 (105)	40 (105)	
Minimum Operating Temperature	°C (°F)	2 (36)	2 (36)	
SOUND LEVEL (2)				
Base mounted Enclosed	dB(A)	65	65	
COOLING DATA				
Air-cooled (Ambient Temperature 40°C/104°F)				
Coolant Discharge temperature	°C(°F)	80 (176)	85 (185)	
A/E Injection Temperature	°C(°F)	59 (138)	59 (138)	
(3) Aftercooler - Inlet	°C(°F)	79 (174)	85 (185)	
Aftercooler - Outlet	°C(°F)	51 (124)	51 (124)	
Heat Removal Oil Cooler	kW (1000 Btu/hr)	3.5 (11.9)	3.5 (11.9)	
Heat Removal Oil and Aftercooler	kW (1000 Btu/hr)	4.1 (14.0)	4.1 (14.0)	
Coolant Flow	lpm (UK gpm)	17.0 (3.7)	21.0 (4.6)	
Fan Air Flow	m ³ /min (cfm)	20.0 (700)	20.0 (700)	
Cooling Air CTD	°C (°F)	30 (54)	30 (54)	
Aftercooler CTD (3)	°C (°F)	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		
Coolant Drain	Drain Plug	9/16"-SAE		
Power Inlet	Inch	1"		
COOLANT LUBRICATION DATA				
Coolant Sump Capacity	litres (US gal)	3 (.8)		
Total coolant fill capacity	litres (US gal)	4.5 (1.2)		
DIMENSIONS				
length, width, height	mm	Basemount 1040/728/936	80 gal 1783/737/1513	120 gal 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				
	kg (lb.)	298 (655)	422 (930)	430 (946)

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AIREND DATA								
Rotor Diameter (male)	mm			74.25		74.25		
Male Rotor Speed	rpm			2000		1900		
Tip Speed	m/sec			7.78		7.39		
ELECTRICAL DATA - ALL UNITS SSR UP6-5								
*** NOTE BLUE SHADE DENOTES SINGLE PHASE ***		200-1-60	230-1-60	200v	230v	380v	460v	575v
Nominal Power - Driver	HP	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Maximum Applied Power - Package	HP	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Drive Motor - Protection		ODP	ODP	ODP	ODP	ODP	ODP	ODP
Nominal Current - Drive Motor (8)	Amps	22.8	21.4	14.0	12.2	7.4	6.1	4.9
Package Current - maximum pressure	Amps	25.1	23.5	15.4	13.2	8.3	6.7	5.4
Drive Motor RPM		3520	3480	3510	3510	3510	3510	3510
Drive Motor Frame		184TZ	184TZ	182TZ/184TZ	182TZ/184TZ	182TZ/184TZ	182TZ/184TZ	182TZ/184TZ
Drive Motor Locked Rotor (5)	Amps	171.0	147.0	106.0	92.7	57.0	46.4	37.2
Drive Motor Efficiency (8)		84.5	84.5/83	86.5	86.5	86.5	86.5	86.5
Drive Motor Power Factor (8)		0.96	.89/.92	0.88	0.88	0.88	0.88	0.88
Test Certificate Number (4)		FD-2004-20837	AM44011	FD-2016-164147	FD-2016-152652	FDC 086560.2017	FD-2016-152652	FD-2016-170652
Electrical Installation								
Recommended wire size (6)	Awg	8	8	10	12	14	14	14
Suggested Fuse Rating (7)	Amps	40	40	25	20	12	10	8

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, 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 nominal motor power
- (9) Installation kit will provide flexible connection to NPT or BSPT