

ENGINEERING MANUAL

SSR Small UP SERIES



CCN: 23753643
 Rev.: C
 Ref.: 9902
 Page : 100
 Date: 01st January 2011
 Cancels: 16th July 2008

Point of Manufacture - Campbellville, 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)	0.52 (18.5)	0.45 (16)
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				
		Basemount	80 gal	120 gal
length, width, height	mm	1042/734/914	1362/734/1541	1897/734/1541
	Inches	41/28.9/36	53.6/28.9/60.7	74.7/28.9/60.7
GA Drawing Numbers		22431811	22431829	22469191

SHIPPING DATA - NET WEIGHTS				
	kg (lb.)	295 (650)	420 (925)	436 (960)

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AIREND DATA

	mm	rpm	m/sec
Rotor Diameter (male)	74.25	2000	7.78
Male Rotor Speed		1900	7.39
Tip Speed			

ELECTRICAL DATA - ALL UNITS SSR UP6-5

	230-1-60	200v	230v	460v	575v
Nominal Power - Driver	HP 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
Drive Motor Protection	ODP/TEFC	ODP / TEFC	ODP/TEFC	ODP/TEFC	ODP/TEFC
Nominal Current - Drive Motor (8)	Amps 21.4/21	14.1/13.6	12.3/11.8	6.2/5.9	4.9/4.7
Package Current - maximum pressure	Amps 23.5/23.1	15.5/14.5	13.5/13	6.8/6.5	5.4/5.2
Drive Motor RPM	3480	3480	3480	3480	3480
Drive Motor Frame	184T	182TZ/184TZ	182TZ/184TZ	182TZ/184TZ	182TZ/184TZ
Drive Motor Locked Rotor (5)	Amps 147.0	103.0	90.0	45.0	36.0
Drive Motor Efficiency (8)	84.5/83	87.5/88.5	87.5/88.5	87.5/88.5	87.5/88.5
Drive Motor Power Factor (8)	.89/.92	.88/.9	.88/.9	.88/.9	.88/.9
Test Certificate Number (4)	AM44011 BL65526			AT43040 BK85519	

Electrical Installation

	Awg	8	10	12	14	14
Recommended wire size (6)						
Suggested Fuse Rating (7)	Amps	40	25	20	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 PNEUROP/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