

ENGINEERING MANUAL

SSR
Small UP SERIES



CCN: 23753643
Rev.: D ECO 81751
Ref.: 9902
Page: 100
Date: 30th April 2013
Cancels: 01st January 2011

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)	m³/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	m³/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 1042/734/914	80 gal 1362/734/1541	120 gal 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)

ENGINEERING MANUAL

SSR
Small UP SERIES



CCN: 23753643
Rev.: D ECO 81751
Ref.: 9902
Page: 101
Date: 30th April 2013
Cancels: 01st January 2011

Point of Manufacture - Campbellsville, USA

60 HERTZ ENGINEERING DATA

Model		UP6-5-125	UP6-5-150
-------	--	-----------	-----------

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		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

Recommended wire size (6)	Awg	8	10	12	14	14
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