

ENGINEERING MANUAL

SSR Small UP SERIES



CCN: 23753668
 Rev.: G CN 1272434
 Ref.: 9902
 Page: 104
 Date: 10th Nov 2017
 Cancels: 15th June 2017

Point of Manufacture - Campbellsville, USA

60 HERTZ ENGINEERING DATA

Model		UP6-10-125	UP6-10-150	UP6-10-210
GENERAL COMPRESSOR DATA				
Capacity (Ref. Intake Cond.) FAD (1)	m ³ /min (cfm)	1.02 (36.1)	0.91 (32.3)	0.64 (22.8)
Maximum Operating Pressure	barg (psig)	8.6 (125)	10.3 (150)	14.5 (210)
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
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)
Coolant Flow	lpm (UK gpm)	17.0 (3.7)	21.0 (4.6)	32.0 (7.0)
Fan Air Flow	m ³ /min (cfm)	28.0 (1000)	28.0 (1000)	25.0 (880)
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		
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	74.25
Male Rotor Speed	rpm	4300	3950	3200
Tip Speed	m/sec	16.72	15.36	12.44

ELECTRICAL DATA - ALL UNITS SSR UP6-10

		200v	230v	380v	460v	575v
Nominal Power - Driver	HP	10.0	10.0	10.0	10.0	10.0
Maximum Applied Power - Package	HP	11.0	11.0	11.0	11.0	11.0

		200v	230v	380v	460v	575v
Drive Motor Protection		ODP	ODP	ODP	ODP	ODP
Nominal Current - Drive Motor (8)	Amps	27.5	24.0	14.5	12.0	9.6
Package Current - maximum pressure	Amps	30.3	26.4	15.9	13.2	10.6
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 (5)	Amps	190.0	163.0	100.0	81.5	68.2
Drive Motor Efficiency (8)		89.5	89.5	89.5	89.5	89.5
Drive Motor Power Factor (8)		0.9	0.9	0.9	0.9	0.9
Test Certificate Number (4)		FD-2016-163958	FD-2016-171468	FDC 086606.2017	FD-2016-171468	FD-2016-163825

Electrical Installation

Recommended wire size (6)	Awg	8	8	10	12	14
Suggested Fuse Rating (7)	Amps	50	45	25	20	15

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