

ENGINEERING MANUAL

SSR Small UP SERIES



CCN: 23753650
 Rev.: G CN 1272434
 Ref.: 9902
 Page: 102
 Date: 10th Nov 2017
 Cancels: 15th June 2017

Point of Manufacture - Campbellsville, USA

60 HERTZ ENGINEERING DATA

Model		UP6-7-125	UP6-7-150	UP6-7-210
GENERAL COMPRESSOR DATA				
Capacity (Ref. Intake Cond.) FAD (1)	m ³ /min (cfm)	0.74 (26.3)	0.65 (23.1)	0.45 (16)
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)	65	65	65
COOLING DATA				
Air-cooled (Ambient Temperature 40°C/104°F)				
Coolant Discharge temperature	°C(°F)	87 (189)	86 (187)	90 (194)
A/E Injection Temperature	°C(°F)	79 (174)	79 (174)	79 (174)
(3) Aftercooler - Inlet	°C(°F)	79 (174)	79 (174)	79 (174)
Aftercooler - Outlet	°C(°F)	51 (124)	51 (124)	51 (124)
Heat Removal Oil Cooler	kW (1000 Btu/hr)	5.5 (18.8)	5.5 (18.8)	5.5 (18.8)
Heat Removal Oil and Aftercooler	kW (1000 Btu/hr)	6.1 (20.8)	6.1 (20.8)	6.1 (20.8)
Coolant Flow	lpm (UK gpm)	17.0 (3.7)	21.0 (4.6)	32.0 (7.0)
Fan Air Flow	m ³ /min (cfm)	20.0 (700)	20.0 (700)	16.0 (565)
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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Model		UP6-7-125	UP6-7-150	UP6-7-210		
AIREND DATA						
Rotor Diameter (male)	mm	74.25	74.25	74.25		
Male Rotor Speed	rpm	3200	2850	2375		
Tip Speed	m/sec	12.44	11.08	9.23		
ELECTRICAL DATA - ALL UNITS SSR UP6-7						
		230-1-60	200v	230v	380v	460v
*** NOTE BLUE SHADE DENOTES SINGLE PHASE ***						
Nominal Power - Driver	HP	7.5	7.5	7.5	7.5	7.5
Maximum Applied Power - Package	HP	8.2	8.2	8.2	8.2	8.2
Drive Motor Protection		TEFC	ODP	ODP	ODP	ODP
Nominal Current - Drive Motor (8)	Amps	31.0	20.0	17.8	10.5	8.9
Package Current - maximum pressure	Amps	34.1	22.0	19.6	11.6	9.8
Drive Motor RPM		3495	3510	3510	3510	3510
Drive Motor Frame		184T	184TZ	184TZ	184TZ	184TZ
Drive Motor Locked Rotor (5)	Amps	217.0	159.0	145.0	84.0	73.0
Drive Motor Efficiency (8)		84	88.5	88.5	88.5	88.5
Drive Motor Power Factor (8)		0.92	0.90	0.90	0.90	0.90
Test Certificate Number (4)		BL650710	FD-2016-023195	FD-2016-170821	FDC 086582.2017	FD-2016-170821
			FD-2016-171653			
Electrical Installation						
Recommended wire size (6)	Awg	6	8	10	12	14
Suggested Fuse Rating (7)	Amps	50	35	35	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 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