

ENGINEERING MANUAL

SSR
UP SERIES

CCN: 23753569
Rev.: D ECO: 80133
Ref.: 9905
Page: 112
Date: 07th November 2011
Cancels: 01st January 2011

Confidential Information

Points of Manufacture - Campbellsville Facility, Kentucky & SIRC, Shanghai, PRC.
SSR UP6-30E-115HA, UP6-30E-125HA, UP6-30E-150HA, UP6-30E-200HA
60 HERTZ ENGINEERING DATA

Model		30E-115HA	30E-125HA	30E-150HA	30E-200HA
GENERAL COMPRESSOR DATA					
Capacity (Ref. Intake Cond.) FAD (1)	cfm (m ³ /min)	132 (3.74)	127 (3.60)	115 (3.26)	96 (2.71)
Maximum Operating Pressure	psig (barg)	115 (8.0)	125 (8.5)	150 (10.3)	200 (13.8)
Minimum Operating Pressure	psig (barg)	65 (4.5)	65 (4.5)	65 (4.5)	65 (4.5)
Maximum Operating Temperature	°F (°C)	122 (50)	122 (50)	122 (50)	122 (50)
Minimum Operating Temperature	°F (°C)	36 (2)	36 (2)	36 (2)	36 (2)

SOUND LEVEL (2)

Base mounted Enclosed	dB(A)	69	69	69	69
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COOLING DATA

Air-cooled (Ambient Temperature 50°C/122°F)

Max Airend Discharge Temperature	°F (°C)	216 (102)	216 (102)	216 (102)	216 (102)
A/E Injection Temperature	°F (°C)	179 (81.7)	179 (81.7)	179 (81.7)	179 (81.7)
Aftercooler - Inlet (3)	°F (°C)	216 (102)	216 (102)	216 (102)	216 (102)
Aftercooler - Outlet	°F (°C)	142 (61.1)	141 (60.6)	138 (58.9)	134 (56.7)
Heat Removal Oil Cooler	1000 Btu/hr (kW)	71.6 (21.0)	72.2 (21.1)	73.6 (21.6)	75.9 (22.2)
Heat Removal Oil and Aftercooler	1000 Btu/hr (kW)	92.4 (27.1)	92.9 (27.2)	93.6 (27.4)	93.6 (27.4)
Oil Flow	US gpm (lpm)	10.2 (38.6)	10.6 (40.3)	11.7 (44.2)	14 (53.0)
Fan Air Flow	cfm (m ³ /min)	3100 (87.8)	3100 (87.8)	3100 (87.8)	3100 (87.8)
Cooling Air CTD	°F (°C)	33 (18.2)	33 (18.2)	33 (18.2)	33 (18.2)
Aftercooler CTD (3)	°F (°C)	20 (11.1)	19 (10.6)	16 (8.9)	12 (6.7)

CONSTRUCTION FOUNDATION AND MOUNTING DATA

Base mounted - see installation drawing

22246326

PIPING CONNECTIONS

Air Discharge Base Mount	Inches NPT	1 ¹ / ₂	1 ¹ / ₂	1 ¹ / ₂	1 ¹ / ₂
Condensate Drain	Inches NPT	1/4	1/4	1/4	1/4
Coolant Drain	Ball Valve -Inch NPT	1/2	1/2	1/2	1/2
Power Inlet	Inches	2. 1/2	2. 1/2	2. 1/2	2. 1/2

COOLANT LUBRICATION DATA

Coolant Sump Capacity	US Gal. (liters)	3.7 (14)	3.7 (14)	3.7 (14)	3.7 (14)
Total coolant fill capacity	US Gal. (liters)	5.5 (21)	5.5 (21)	5.5 (21)	5.5 (21)

DIMENSIONS

length, width, height	Inches	Base Mounted 67.4/ 54.3 / 52.8			
	mm	1712/ 1379 / 1344			

SHIPPING DATA - NET WEIGHTS

	lb. (kg)	TEFC Motor 2436 (1105)	ODP motor 2326 (1055)
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AIREND DATA

Rotor Diameter (male)	inches	5.05	5.05	5.05	5.05
Male Rotor Speed	rpm	2969	2862	2616	2208
Tip Speed	ft/sec	65.40	63.04	57.62	48.63

ELECTRICAL DATA - ALL UNITS SSR UP6-30E HA		Volts		200		230		380		460		575	
Nominal Power - Driver	hp			30.0		30.0		30.0		30.0		30.0	
Rated Power - Fan	hp			1.3		1.3		1.3		1.3		1.3	
Maximum Applied Power - Package	hp			34.3		34.3		34.3		34.3		34.3	
				ODP	TEFC	ODP	TEFC	ODP	TEFC	ODP	TEFC	ODP	TEFC
Motor Enclosure													
Nominal Current - Drive Motor (6)	Amps			90.6	89.8	78.8	78.1	47.7	47.3	39.4	39.0	31.5	31.2
Package Current (includes fan) - maximum pressure	Amps			106.2	105.4	92.3	91.7	55.9	55.5	46.2	45.8	36.9	36.7
Drive Motor RPM				1775	1775	1775	1775	1775	1775	1775	1775	1775	1775
Drive Motor Frame				324T	324T	324T	324T	324T	324T	324T	324T	324T	324T
Drive Motor Locked Rotor - Full Voltage - EISA	Amps			864.2	905.0	751.5	787.0	454.8	476.3	375.7	393.5	300.6	314.8
Drive Motor Efficiency (6) - EISA				0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941
Drive Motor Power Factor (6) - EISA				0.80	0.81	0.80	0.81	0.80	0.81	0.80	0.81	0.80	0.81
Fan Motor Efficiency (6)				0.855		0.855		0.855		0.855		0.855	
Fan Motor Power Factor (6)				0.62		0.62		0.62		0.62		0.62	
Fan Motor Full Voltage Locked Rotor Current				43.7		38		23		19		15.2	
Electrical Installation													
Mains Supply Cable (5)	Gage			3/0	3/0	1/0	1/0	3	3	4	4	6	6
Suggested Fuse Rating	Amps			150	125	125	125	75	75	60	60	50	50

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 ISO 2151; 2004 annex C, with + 3 dB(A) tolerance.
- (3) 40% Relative Humidity Inlet Air
- (5) 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.
- (6) Measured at nominal motor power