Kobelco KNW Series
100-200HP Oil-Free Air Compressor

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COMPRESSED AIR SYSTEMS

Kobelco 100-200HP Oil-Free Air Compressor

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OIL-FREE ROTARY SCREW AIR COMPRESSORS, H – SERIES, AIR-COOLED, PERFORMANCE DATA, GPCAS100-200HPOF, EFFECTIVE, 1/27/2014

MODEL - GPCAS100-200HPOF

PRODUCT DATA	UNITS	A0 /EH	A1 /GH
MOTOR HORSEPOWER		100 HP	200 HP
	NAMEPLATE	100 HP	200 HP
	SERVICE FACTOR	125 HP	250 HP
	FL SPEED	3570 RPM	3570 RPM
	EFFICIENCY	95%	95.50%
	COMPRESSOR SPEED		
	1ST STAGE	27132 RPM	14181 RPM
	2ND STAGE	25840 RPM	21271 RPM
ROTOR DIAMETER			
	1ST STAGE	88 MM	137 MM
	2ND STAGE	71 MM	88 MM
DISPLACEMENT			
	1ST STAGE	477 CFM	883 CFM
WORKING PRESSURE			
	MINIMUM	40 PSIG	40 PSIG
	MAXIMUM	135 PSIG	135 PSIG
COMPRESSION RATIO			
	MAXIMUM	11:01 RATIO	10:01 RATIO
GYRATIC MASS OF COMPRESSORS & COUPLING		13.1 LBS-FT 2	17.8 LBS-FT 2
COMPRESSOR CAPACITY	AT PRESSURE		
	150 PSIG	—	—
	135 PSIG	400 ACFM	811 ACFM
	125 PSIG	401 ACFM	812 ACFM
	115 PSIG	402 ACFM	814 ACFM
	110 PSIG	402 ACFM	814 ACFM
	100 PSIG	403 ACFM	815 ACFM
	75 PSIG	405 ACFM	819 ACFM
SHAFT INPUT POWER	AT PRESSURE		
	150 PSIG	—	—
	135 PSIG	110 BHP	207 BHP
	125 PSIG	105 BHP	197 BHP
	115 PSIG	100 BHP	187 BHP
	110 PSIG	97 BHP	182 BHP
	100 PSIG	92 BHP	175
	75 PSIG	79 BHP	155
	UNLOADED	19 BHP	33
SPECIFIC POWER CONSUMPTION	AT PRESSURE		
	150 PSIG	—	—
	135 PSIG	27.5 BHP/100 CFM	25.5 BHP/100 CFM
	125 PSIG	26.2 BHP/100 CFM	24.3 BHP/100 CFM
	115 PSIG	24.9 BHP/100 CFM	23 BHP/100 CFM
	110 PSIG	24.1 BHP/100 CFM	22.4 BHP/100 CFM
	100 PSIG	22.8 BHP/100 CFM	21.8 BHP/100 CFM
	75 PSIG	19.5 BHP/100 CFM	18.9 BHP/100 CFM
STANDARD	AMBIENT PRESSURE 14.5 PSIA - CAPACITY ± 4%		
OPERATING CONDITIONS	AMBIENT TEMPERATURE 80 °F - SPECIFIC POWER ± 5% RELATIVE HUMIDITY 60%		
SOUND PRESSURE LEVEL			
	AVERAGE @ 1 METER	79 DBA	85 DBA
HEAT REJECTION (@ 135 PSI)			
	TO AIR	5280 BTU/MIN	9220 BTU/MIN
COOLING FAN			
	DIAMETER	26 IN.	32 IN.
	AIR FLOW	6500 CFM	11,500 CFM
COOLING FAN MOTOR		3 HP	7 1/2 HP
		1750 RPM	1760 RPM
LUBE OIL PUMP MOTOR		2 HP	3 HP
		1740 RPM	1750 RPM
LUBE OIL PUMP CAPACITY		11:01 GPM	16.2 GPM
LUBE OIL SUMP CAPACITY		5.5 GAL.	9 GAL.
DISCHARGE SAFETY VALVE			
	SETTING	165 PSIG	165 PSIG
MAXIMUM COOLING DUCT ΔP			
	SUCTION	0.12 IN. W.C.	0.12 IN. W.C.
	OUTLET	0.12 IN. W.C.	0.12 IN. W.C.
DIMENSIONS			
	LENGTH	79.71 IN.	104.5 IN.
	WIDTH	48 IN.	70.75 IN.
	HEIGHT	98.64 IN.	100 IN.
APPROXIMATE SHIPPING WEIGHT		5000 LBS.	8640 LBS.
DISCHARGE AIR CONNECTION		2 IN NPT	21/2 IN NPT
CONDENSATE DRAIN			
	CONNECTION (2)	½ IN. NPT	½ IN. NPT
MINIMUM RECOMMENDED		53 FT 3	87 FT 3
AIR RECEIVER SIZE		400 GAL.	650 GAL.
AFTERCOOLER TERMINAL			
APPROACH TEMPERATURE		19 °F	20 °F
MAXIMUM AMBIENT TEMP.		104 °F	104 °F
SINGLE POINT ELECTRICAL CONNECTION	SINGLE POLE CAM-LOKS		
ELECTRICAL DATA	RUNNING AMPS	FLA 110 AMPS	FLA 216 AMPS
	RECOMMENDED BREAKER	200 AMPS	400 AMPS
	STARTER TYPE	WYE-DELTA	WYE-DELTA
	VOLTAGE	460V/3PH	460V/3PH