

		Technical Data Sheet		Code										
				GEAF4T350A-ASE										
Ing. Enea Mattei S.p.A.		PRODUCT SPECIFICATIONS		1/16/17 <i>date</i>										
				draft <i>revision</i>										
				1/2/13 <i>issue</i>										
Model				OPTIMA 90										
Description				Variable speed unit										
Arrangement				Silenced										
Series				4000 STANDARD PRODUCT										
Air End frame				M 170										
Version				n.a.										
OIL cooling medium				Air										
AIR cooling medium				Air										
Modulation				No										
Decompression				Yes										
Receiver				n.a.										
Inlet nominal pressure				ISO 1217	psi (a)	14.5								
Inlet nominal temperature				ISO 1217	°F	68								
Relative humidity				ISO 1217	%	0								
Motor nominal speed				ISO 1217	rpm	1500								
Nominal working pressure					psi (g)	min 102 - 145 max								
Maximum working pressure					psi (g)	145								
Nominal delivery				(1)	cfm	min 292.8 - 523.4 - 581.6 max								
Terminals absorbed power				(2) (6)	kW	94.42								
Terminals unload absorbed power					Kw	9.90								
Noise level (max)				ISO 2151 - @1 mt	dBA	68								
Oil carry over					ppm	3								
Total heat recovery (up to ...)					%	95								
Oil circuit capacity					gallons	13.5								
PERFORMANCES														
OPTIMA PERFORMANCES														
psi (g)		rpm	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	rpm
102	Flow rate	cfm	298.8	333.0	366.2	399.1	431.2	462.6	493.7	523.4	552.7	581.6	-	Delivery
	Power	kW	48.22	55.48	61.66	67.98	74.45	81.03	87.76	94.42	101.69	108.82	-	Absorbed power
116	Flow rate	cfm	296.6	330.2	363.4	395.9	427.7	459.1	489.5	519.1	548.4	-	-	Delivery
	Power	kW	52.85	59.32	65.93	72.67	79.56	86.60	93.76	101.07	108.59	-	-	Absorbed power
131	Flow rate	cfm	294.5	328.1	360.9	393.4	424.8	455.9	486.3	515.6	-	-	-	Delivery
	Power	kW	56.00	62.85	69.84	76.98	84.26	91.69	99.26	106.99	-	-	-	Absorbed power
145	Flow rate	cfm	292.8	326.0	358.8	390.9	422.4	453.1	483.5	512.4	-	-	-	Delivery
	Power	kW	58.78	65.97	73.29	80.78	88.41	96.19	104.13	112.22	-	-	-	Absorbed power
ELECTRICAL CHARACTERISTICS														
Electric certification							-					UL/CSA		
Starting type							-					INVERTER		
Voltage -- Frequency -- Phases								V / Hz / Ph				400-460 / 50-60 / 3		
Auxiliary circuit tension								V				110		
Nominal absorbed current							(6)	A				162.3		
Minimum supply cables section (33 ft.)								AWG				4		
MAIN MOTOR														
Nominal power input								kW / HP				90 / 120		
Efficiency class												IE3		
Efficiency								%				95.4		
Poles												4		
Protection index								IP				55		
Insulation class												F		
COOLING														
Maximum ambient temperature								°F				104		
Minimum ambient temperature								°F				34		
Outlet AIR temperature							(5)	°F				< 86		
OIL maximum temperature								°F				248		
OIL minimum temperature								°F				176		
Fan type												Centrifugal		
Cooling AIR flow (minimum)							(3)	cfm				4414		
Cooling AIR flow (maximum)							(4)	cfm				9417		
Heat Removal Oil and Aftercooler							(4)	Btu/hr				322255		
Fan residual head (minimum)							(3)	Pa				-		
Fan residual head (maximum)							(4)	Pa				80		
Fan absorbed power (minimum)							(3)	kW				-		
Fan absorbed power (maximum)							(4)	kW				2.2		
WATER flow								gpm				-		
Water INLET temperature								°F				-		
Water OUTLET maximum temperature								°F				-		
Water minimum suggested pressure								psi (g)				-		
Thermal recoverable power								Kcal				-		
DRYER														
Refrigerant gas												-		
Dew point (pressure)								°F				-		
Absorbed power								kW				-		
Regeneration air percentage								%				-		
Supply: Voltage - frequency - phases								V / Hz / Ph				-		
DIMENSIONS														
AIR outlet connection												Rp 2"		
Condensate separator drain connection												Rp 2"		
Condensate drain connection												-		
Condensate DRYER drain connection												-		
Receiver condensate drain connection												-		
INLET-OUTLET water connections												-		
Storage AIR receiver volume								gallons				n.a.		
Width								inch				49		
Length								inch				95		
Height								inch				74		
Weight								lbs				4,343		
NOTES														
(1) - Accordina to ISO 1217 - Annex C (fixed speed) & Annex E (variable speed)														
(2) - Fan included (@ first speed if available) - Dryer input power excluded														
(3) - Fan @ lower speed (OPTIMA @ min speed)														
(4) - Fan @ faster speed (Optima : fan @50Hz)														
(5) - @ reference conditions														
(6) - OPTIMA @ 1500 rpm and 102 psi														