


|  | | Technical Data Sheet | | Code | | | | | | | | | | | |
|---|-----------|-------------------------------|-----|----------------------------|---------|----------------------------|-------------|--------|-------|-------|-------|-------|------------------------|----------------|--|
| | | | | GEABBT350A-ASE | | | | | | | | | | | |
| Ing. Enea Mattei S.p.A. | | PRODUCT SPECIFICATIONS | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| Model | | | | OPTIMA 22 | | | | | | | | | | | |
| Description | | | | Variable speed unit | | | | | | | | | | | |
| Arrangement | | | | Silenced | | | | | | | | | | | |
| Series | | | | 1000 | | | | | | | | | | | |
| Air End frame | | | | M 111 | | | | | | | | | | | |
| 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 80.2 - 109.1 - 130 max | | | | | | | | | |
| Terminals absorbed power | | | | (2) (6) | kW | 20.05 | | | | | | | | | |
| Terminals unload absorbed power | | | | | Kw | 2.94 | | | | | | | | | |
| Noise level (max) | | | | ISO 2151 - @1 mt | dBA | 67 | | | | | | | | | |
| Oil carry over | | | | | ppm | 3 | | | | | | | | | |
| Total heat recovery (up to ...) | | | | | % | 95 | | | | | | | | | |
| Oil circuit capacity | | | | | gallons | 3 | | | | | | | | | |
| PERFORMANCES | | | | | | | | | | | | | | | |
| OPTIMA PERFORMANCES | | | | | | | | | | | | | | | |
| psi (g) | | rpm | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | rpm | |
| 102 | Flow rate | cfm | - | - | - | 81.9 | 89.0 | 95.7 | 102.8 | 109.1 | 116.5 | 123.2 | 130.0 | Delivery | |
| | Power | kW | - | - | - | 14.59 | 15.96 | 17.35 | 18.65 | 20.05 | 21.46 | 23.06 | 24.67 | Absorbed power | |
| 116 | Flow rate | cfm | - | - | - | 81.2 | 88.3 | 95.0 | 102.1 | 108.4 | 115.8 | 122.2 | - | Delivery | |
| | Power | kW | - | - | - | 15.60 | 17.06 | 18.55 | 19.92 | 21.42 | 22.92 | 24.63 | - | Absorbed power | |
| 131 | Flow rate | cfm | - | - | - | 80.5 | 87.6 | 94.3 | 101.4 | 107.4 | - | - | - | Delivery | |
| | Power | kW | - | - | - | 16.53 | 18.08 | 19.65 | 20.84 | 22.69 | - | - | - | Absorbed power | |
| 145 | Flow rate | cfm | - | - | - | 80.2 | 86.9 | 93.9 | 100.6 | 107.0 | - | - | - | Delivery | |
| | Power | kW | - | - | - | 17.34 | 18.97 | 20.61 | 22.15 | 22.86 | - | - | - | Absorbed power | |
| ELECTRICAL CHARACTERISTICS | | | | | | | | | | | | | | | |
| Electric certification | | | | | | | - | | | | | | | CEI | |
| Starting type | | | | | | | - | | | | | | | INVERTER | |
| Voltage -- Frequency -- Phases | | | | | | | V / Hz / Ph | | | | | | 400-460 / 50-60 / 3 | | |
| Auxiliary circuit tension | | | | | | | V | | | | | | 110 | | |
| Nominal absorbed current | | | | | | | (6) | A | | | | | | 35.3 | |
| Minimum supply cables section (33 ft.) | | | | | | | AWG | | | | | | 10 | | |
| MAIN MOTOR | | | | | | | | | | | | | | | |
| Nominal power input | | | | | | | kW / HP | | | | | | 22 / 30 | | |
| Efficiency class | | | | | | | - | | | | | | IE3 | | |
| Efficiency | | | | | | | % | | | | | | 93.6 | | |
| 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 | | | | | | | - | | | | | | Axial | | |
| Cooling AIR flow (minimum) | | | | | | | (3) | cfm | | | | | | 1.648 | |
| Cooling AIR flow (maximum) | | | | | | | (4) | cfm | | | | | | 2.972 | |
| Heat Removal Oil and Aftercooler | | | | | | | (4) | Btu/hr | | | | | | 68431 | |
| Fan residual head (minimum) | | | | | | | (3) | Pa | | | | | | - | |
| Fan residual head (maximum) | | | | | | | (4) | Pa | | | | | | 20 | |
| Fan absorbed power (minimum) | | | | | | | (3) | kW | | | | | | - | |
| Fan absorbed power (maximum) | | | | | | | (4) | kW | | | | | | 0.5 | |
| 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 1" | | |
| Condensate separator drain connection | | | | | | | - | | | | | | Rp 1" | | |
| Condensate drain connection | | | | | | | - | | | | | | 10 mm (MASCHIO / male) | | |
| Condensate DRYER drain connection | | | | | | | - | | | | | | - | | |
| Receiver condensate drain connection | | | | | | | - | | | | | | - | | |
| INLET-OUTLET water connections | | | | | | | - | | | | | | - | | |
| Storage AIR receiver volume | | | | | | | gallons | | | | | | n.a. | | |
| Width | | | | | | | inch | | | | | | 31 | | |
| Length | | | | | | | inch | | | | | | 59 | | |
| Height | | | | | | | inch | | | | | | 47 | | |
| Weight | | | | | | | lbs | | | | | | 1,047 | | |
| 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 | | | | | | | | | | | | | | | |