## GENERAL SPECIFICATIONS

| Specification | Value |
|---|---|
| Range of Product | Altistart 22 |
| Product or Component Type | Soft starter |
| Product destination | Asynchronous motors |
| Product Specific Application | Pumps and fans |
| Component name | ATS22 |
| Phase | 3 phase |
| [Us] rated supply voltage | 230...440 V - 15...10 % |
| Motor power kW | 160 kW 400 V<br>160 kW 440 V<br>90 kW 230 V |
| Factory setting current | 285 A |
| Power dissipation in W | 150 W for standard applications |
| Utilisation category | AC-53A |
| Type of start | Start with torque control (current limited to 3.5 In) |
| Icl starter rating | 320 A connection in the motor supply line for standard applications |
| IP Degree of Protection | IP00 |

## COMPLEMENTARY SPECIFICATIONS

| Specification | Value |
|---|---|
| Assembly style | With heat sink |
| Function Available | Internal bypass |
| Supply voltage limits | 195...484 V |
| Supply frequency | 50...60 Hz - 10...10 % |
| Network Frequency | 45...66 Hz |
| Device connection | To the motor delta terminals<br>In the motor supply line |
| [Uc] control circuit voltage | 230 V - 15...10 % 50/60 Hz |
| Control circuit consumption | 20 W |
| Discrete output number | 2 |
| Discrete output type | Relay outputs R1 230 V running, alarm, trip, stopped, not stopped, starting, ready C/O<br>Relay outputs R2 230 V running, alarm, trip, stopped, not stopped, starting, ready C/O |
| Minimum switching current | 100 mA 12 V DC relay outputs |
| Maximum switching current | 5 A 250 V AC resistive 1 relay outputs<br>5 A 30 V DC resistive 1 relay outputs<br>2 A 250 V AC inductive 0.4 20 ms relay outputs<br>2 A 30 V DC inductive 7 ms relay outputs |
| Discrete input number | 3 |
| Discrete input type | LI1, LI2, LI3 logic, 5 mA 4.3 kOhm |
| Discrete input voltage | 24 V <= 30 V |

## COMPLEMENTARY SPECIFICATIONS

| Specification | Value |
|---|---|
| Discrete input logic | Positive logic LI1, LI2, LI3 < 5 V <= 2 mA > 11 V, >= 5 mA |
| Output current | 0.4...1 Icl adjustable |
| PTC probe input | 750 Ohm |
| Communication Port Protocol | Modbus |
| Connector Type | 1 RJ45 |
| Communication data link | Serial |
| Physical interface | RS485 multidrop |
| Transmission Rate | 4800, 9600 or 19200 bps |
| Installed device | 31 |
| Protection type | Phase failure: line<br>Thermal protection: motor<br>Thermal protection: starter |
| Marking | CE |
| Type of cooling | Forced convection |
| Operating position | Vertical +/- 10 degree |
| Height | 16.7 in (425 mm) |
| Width | 8.1 in (206 mm) |
| Depth | 11.8 in (299 mm) |
| Net Weight | 72.8 lb(US) (33 kg) |
| Motor power range AC-3 | 55...100 kW 200...240 V 3 phase<br>110...220 kW 380...440 V 3 phase |
| Motor starter type | Soft starter |

## ENVIRONMENT SPECIFICATIONS

| Specification | Value |
|---|---|
| Electromagnetic compatibility | Conducted and radiated emissions level A conforming to IEC 60947-4-2<br>Damped oscillating waves level 3 conforming to IEC 61000-4-12<br>Electrostatic discharge level 3 conforming to IEC 61000-4-2<br>Immunity to electrical transients level 4 conforming to IEC 61000-4-4<br>Immunity to radiated radio-electrical interference level 3 conforming to IEC 61000-4-3<br>Voltage/current impulse level 3 conforming to IEC 61000-4-5 |
| Standards | IEC 60947-4-2 |
| Product Certifications | UL<br>CCC<br>C-Tick<br>CSA<br>GOST |
| Vibration resistance | 1 gn (f= 13...200 Hz) conforming to IEC 60068-2-6<br>1.5 mm (f=2...13 Hz) conforming to IEC 60068-2-6 |
| Shock resistance | 15 gn for 11 ms IEC 60068-2-27 |

## ENVIRONMENT SPECIFICATIONS

| Specification | Value |
|---|---|
| Noise level | 56 dB |
| Pollution degree | Level 2 IEC 60664-1 |
| Relative humidity | 0...95 % without condensation or dripping water IEC 60068-2-3 |
| Ambient air temperature for operation | 14...104 °F (-10...40 °C) (without derating)<br>104...140 °F (40...60 °C) (with current derating 2.2 % per °C) |
| Ambient Air Temperature for Storage | -13...158 °F (-25...70 °C) |
| Operating altitude | <= 3280.84 ft (1000 m) without derating<br>> 3280.84...< 6561.68 ft (>1000...<2000 m) with current derating of 2.2 % per additional 100 m |

## PACKING UNITS SPECIFICATIONS

| Specification | Value |
|---|---|
| Unit Type of Package 1 | PCE |
| Nbr. of units in pkg. | 1 |
| Package 1 Height | 19.3 in (49.0 cm) |
| Package 1 Width | 14.4 in (36.5 cm) |
| Package 1 Length | 21.5 in (54.5 cm) |
| Package weight(Lbs) | (24.5 kg) |
| Warranty (in months) | 18 |

## PACKING UNITS SPECIFICATIONS

