

# Product data sheet

Specifications



soft starter for asynchronous motor,  
ATS48, 162 A, 230..415 V, 37..132  
KW

ATS48C17Q

## Main

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of product             | Altistart 48                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Product or component type    | Soft starter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Product destination          | Asynchronous motors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Product specific application | Heavy duty industry and pumps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Device short name            | ATS48                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Power supply voltage         | 230...415 V - 15...10 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Motor power kW               | 75 kW at 230 V connection to the motor delta terminals for severe applications<br>75 kW at 400 V connection in the motor supply line for severe applications<br>90 kW at 230 V connection to the motor delta terminals for standard applications<br>90 kW at 400 V connection in the motor supply line for standard applications<br>110 kW at 400 V connection to the motor delta terminals for severe applications<br>132 kW at 400 V connection to the motor delta terminals for standard applications<br>37 kW at 230 V connection in the motor supply line for severe applications<br>45 kW at 230 V connection in the motor supply line for standard applications |
| Power dissipation in W       | 391 W for severe applications<br>479 W for standard applications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Utilisation category         | AC-53A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Type of start                | Start with torque control (current limited to 5 In)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Icl nominal current          | 170 A for connection in the motor supply line for severe applications<br>170 A for connection in the motor supply line for standard applications<br>294 A for connection to the motor delta terminals for severe applications<br>294 A for connection to the motor delta terminals for standard applications                                                                                                                                                                                                                                                                                                                                                           |

## Complementary

|                                    |                                                                                                                                                                                                                     |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Assembly style                     | With heat sink                                                                                                                                                                                                      |
| Function available                 | External bypass (optional)                                                                                                                                                                                          |
| Power supply frequency             | 50...60 Hz - 5...5 %                                                                                                                                                                                                |
| Power supply frequency limits      | 47.5...63 Hz                                                                                                                                                                                                        |
| Device connection                  | To the motor delta terminals<br>In the motor supply line                                                                                                                                                            |
| Discrete output number             | 2                                                                                                                                                                                                                   |
| Discrete output type               | (LO1) logic output 0 V common configurable<br>(LO2) logic output 0 V common configurable<br>(R1) relay outputs fault relay NO<br>(R2) relay outputs end of starting relay NO<br>(R3) relay outputs motor powered NO |
| Output absolute accuracy precision | +/- 5 %                                                                                                                                                                                                             |

|                             |                                                                                                                                                                            |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minimum switching current   | 10 mA at 6 V DC for relay outputs                                                                                                                                          |
| Maximum switching current   | Logic output 0.2 A at 30 V DC<br>Relay outputs 1.8 A at 230 V AC inductive load, cos phi = 0.5 20 ms<br>Relay outputs 1.8 A at 30 V DC inductive load, cos phi = 0.5 20 ms |
| Discrete input number       | 5                                                                                                                                                                          |
| Discrete input type         | PTC, 750 Ohm at 25 °C<br>(Stop, Run, LI3, LI4) logic, <= 8 mA 4300 Ohm                                                                                                     |
| Discrete input voltage      | 24 V <= 30 V                                                                                                                                                               |
| Discrete input logic        | Positive logic Stop, Run, LI3, LI4 at State 0: < 5 V and <= 2 mA at State 1: > 11 V, >= 5 mA                                                                               |
| Starting current            | 0.4...1.3 Icl adjustable                                                                                                                                                   |
| Analogue output type        | Current output AO: 0-20 mA or 4-20 mA, impedance <500 Ohm                                                                                                                  |
| Communication port protocol | Modbus                                                                                                                                                                     |
| Connector type              | 1 RJ45                                                                                                                                                                     |
| Communication data link     | Serial                                                                                                                                                                     |
| Physical interface          | RS485 multidrop                                                                                                                                                            |
| Transmission rate           | 4800, 9600 or 19200 bps                                                                                                                                                    |
| Max nodes number            | 31                                                                                                                                                                         |
| Protection type             | Phase failure: line<br>Thermal protection: motor<br>Thermal protection: starter                                                                                            |
| Marking                     | CE                                                                                                                                                                         |
| Operating position          | Vertical +/- 10 degree                                                                                                                                                     |
| Height                      | 340 mm                                                                                                                                                                     |
| Width                       | 200 mm                                                                                                                                                                     |
| Depth                       | 265 mm                                                                                                                                                                     |
| Product weight              | 12.4 kg                                                                                                                                                                    |
| Motor power range AC-3      | 30...50 kW at 200...240 V 3 phases<br>55...100 kW at 380...440 V 3 phases<br>55...100 kW at 200...240 V 3 phases<br>110...220 kW at 380...440 V 3 phases                   |
| Motor starter type          | Soft starter                                                                                                                                                               |

## Environment

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electromagnetic compatibility         | Conducted and radiated emissions level A conforming to IEC 60947-4-2<br>Conducted and radiated emissions level B 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                             | EN/IEC 60947-4-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Product certifications                | C-Tick<br>NOM 117<br>CCC<br>GOST<br>TCF<br>DNV<br>SEPRO<br>CSA<br>UL                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Noise level                           | 50 dB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Relative humidity                     | 0...95 % without condensation or dripping water conforming to EN/IEC 60068-2-3                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Ambient air temperature for operation | 40...60 °C (with current derating of 2 % per °C)<br>-10...40 °C (without derating)                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Ambient air temperature for storage   | -25...70 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

|                    |                                                                                                   |
|--------------------|---------------------------------------------------------------------------------------------------|
| Operating altitude | <= 1000 m without derating<br>> 1000...2000 m with current derating of 2.2 % per additional 100 m |
|--------------------|---------------------------------------------------------------------------------------------------|

### Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Weight             | 14.492 kg |
| Package 1 Height             | 33 cm     |
| Package 1 width              | 43 cm     |
| Package 1 Length             | 46 cm     |
| Unit Type of Package 2       | P06       |
| Number of Units in Package 2 | 2         |
| Package 2 Weight             | 40 kg     |
| Package 2 Height             | 73.5 cm   |
| Package 2 width              | 80 cm     |
| Package 2 Length             | 60 cm     |

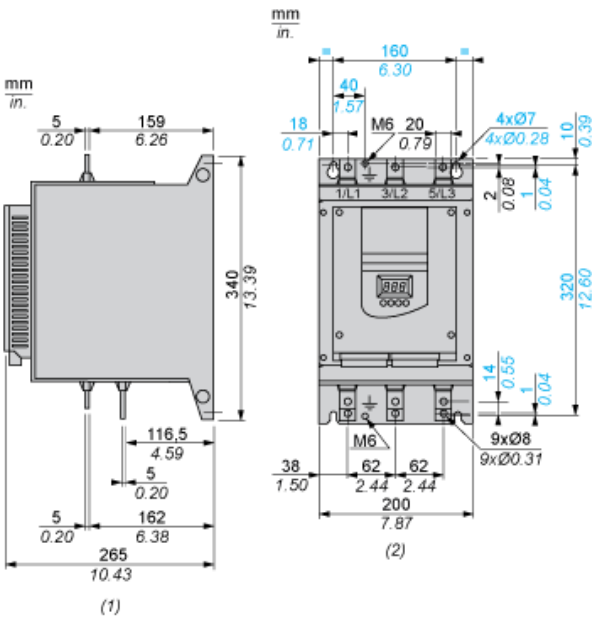
### Offer Sustainability

|                            |                                                                                                                                                                                                                                                                                             |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                                                                                                       |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                                                                                                                                                                                           |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a>                                                                                                                                                                                           |
| Mercury free               | Yes                                                                                                                                                                                                                                                                                         |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                                                                                                                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a>                                                                                                                                                                                                                                                      |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                                                                                                                                                                                               |
| Circularity Profile        | <a href="#">End of Life Information</a>                                                                                                                                                                                                                                                     |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins                                                                                                                                                                 |
| California proposition 65  | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |

### Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
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Dimensions



(1) Right View  
(2) Front View

Clearance

