

# ATS48D17Q

soft starter for asynchronous motor - ATS48 - 14.8 A  
- 230..415 V - 3..15 KW



## 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| [Us] rated supply voltage    | 230...415 V (- 15...10 %)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Motor power kW               | 7.5 kW at 230 V (connection to the motor delta terminals) for standard applications<br>7.5 kW at 400 V (connection in the motor supply line) for standard applications<br>11 kW at 400 V (connection to the motor delta terminals) for severe applications<br>15 kW at 400 V (connection to the motor delta terminals) for standard applications<br>3 kW at 230 V (connection in the motor supply line) for severe applications<br>4 kW at 230 V (connection in the motor supply line) for standard applications<br>5.5 kW at 230 V (connection to the motor delta terminals) for severe applications<br>5.5 kW at 400 V (connection in the motor supply line) for severe applications |
| Power dissipation in W       | For severe applications 46 W<br>For standard applications 59 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Utilisation category         | AC-53A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Type of start                | Start with torque control (current limited to 5 In)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| IcL starter rating           | 17 A (connection in the motor supply line) for standard applications<br>17 A (connection in the motor supply line) for severe applications<br>29 A (connection to the motor delta terminals) for severe applications<br>29 A (connection to the motor delta terminals) for standard applications                                                                                                                                                                                                                                                                                                                                                                                       |
| IP degree of protection      | IP20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## Complementary

|                                    |                                                                                                                                                                                                                     |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Assembly style                     | With heat sink                                                                                                                                                                                                      |
| Function available                 | External bypass (optional)                                                                                                                                                                                          |
| Supply voltage limits              | 195...456 V                                                                                                                                                                                                         |
| Supply frequency                   | 50...60 Hz (- 5...5 %)                                                                                                                                                                                              |
| Network frequency                  | 47.5...63 Hz                                                                                                                                                                                                        |
| Device connection                  | In the motor supply line<br>To the motor delta terminals                                                                                                                                                            |
| Factory setting current            | 14.8 A                                                                                                                                                                                                              |
| [Uc] control circuit voltage       | 220 - 15 % to 415 + 10 %, 50/60 Hz                                                                                                                                                                                  |
| Control circuit consumption        | 30 W                                                                                                                                                                                                                |
| 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          | Relay outputs 10 mA at 6 V DC                                                                                                                                                                                       |
| Maximum switching current          | Logic output 0.2 A at 30 V DC                                                                                                                                                                                       |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Relay outputs 1.8 A at 230 V AC inductive load, cos phi = 0.5, L/R = 20 ms  
Relay outputs 1.8 A at 30 V DC inductive load, cos phi = 0.5, L/R = 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) state 0 < 5 V and <= 2 mA, state 1 > 11 V and >= 5 mA                                                                                                                                 |
| Supply inrush current       | Adjustable 0.4...1.3 Icl                                                                                                                                                                                                   |
| Analogue output type        | (AO) current output 0-20 mA or 4-20 mA <= 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                                                                                                                                                                                                    |
| Installed device            | 31                                                                                                                                                                                                                         |
| Protection type             | Phase failure (line)<br>Thermal protection (motor)<br>Thermal protection (starter)                                                                                                                                         |
| Marking                     | CE                                                                                                                                                                                                                         |
| Type of cooling             | Natural convection                                                                                                                                                                                                         |
| Operating position          | Vertical +/- 10 degree                                                                                                                                                                                                     |
| Height                      | 275 mm                                                                                                                                                                                                                     |
| Width                       | 160 mm                                                                                                                                                                                                                     |
| Depth                       | 190 mm                                                                                                                                                                                                                     |
| Product weight              | 4.9 kg                                                                                                                                                                                                                     |
| Power range                 | 2.2...3 kW at 200...240 V 3 phases<br>7...11 kW at 380...440 V 3 phases<br>4...6 kW at 380...440 V 3 phases<br>4...6 kW at 200...240 V 3 phases<br>7...11 kW at 200...240 V 3 phases<br>15...25 kW at 380...440 V 3 phases |
| Motor starter type          | Soft starter                                                                                                                                                                                                               |

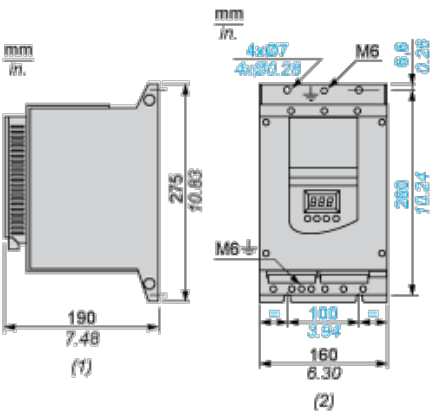
## Environment

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| electromagnetic compatibility         | Conducted and radiated emissions conforming to IEC 60947-4-2 level A<br>Conducted and radiated emissions conforming to IEC 60947-4-2 level B<br>Damped oscillating waves conforming to IEC 61000-4-12 level 3<br>Electrostatic discharge conforming to IEC 61000-4-2 level 3<br>Immunity to electrical transients conforming to IEC 61000-4-4 level 4<br>Immunity to radiated radio-electrical interference conforming to IEC 61000-4-3 level 3<br>Voltage/current impulse conforming to IEC 61000-4-5 level 3 |
| standards                             | EN/IEC 60947-4-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| product certifications                | CCC<br>CSA<br>C-Tick<br>DNV<br>GOST<br>NOM 117<br>SEPRO<br>TCF<br>UL                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| vibration resistance                  | 1 gn (f = 13...200 Hz) conforming to EN/IEC 60068-2-6<br>1.5 mm (f = 2...13 Hz) conforming to EN/IEC 60068-2-6                                                                                                                                                                                                                                                                                                                                                                                                 |
| shock resistance                      | 15 gn for 11 ms conforming to EN/IEC 60068-2-27                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| pollution degree                      | Level 3 conforming to IEC 60664-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| relative humidity                     | 0...95 % without condensation or dripping water conforming to EN/IEC 60068-2-3                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| ambient air temperature for operation | -10...40 °C without derating<br>-10...40 °C without derating<br>40...60 °C with current derating of 2 % per °C                                                                                                                                                                                                                                                                                                                                                                                                 |
| 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                                                                                                                                                                                                                                                                                                                                                                                                              |

Contractual warranty

|                 |           |
|-----------------|-----------|
| Warranty period | 18 months |
|-----------------|-----------|

Dimensions



- (1) Right View
- (2) Front View

Clearance

