



Product designation  
Product type designation  
Motor type

Soft Starter  
ADX...B  
Asynchronous  
three phase

### Electrical features

Supplies voltage

|                               |                |
|-------------------------------|----------------|
| Type of system                | Three phase    |
| Rated supply voltage          | V 208...500VAC |
| auxiliary supply voltage (Us) | 208...240VAC   |
| Rated frequency               | Hz 50/60       |

|                          |   |     |
|--------------------------|---|-----|
| Rated starter current Ie | A | 142 |
|--------------------------|---|-----|

Rated motor power

IEC ratings (T≤40°C)

|        |    |    |
|--------|----|----|
| 230VAC | kW | 37 |
| 400VAC | kW | 75 |
| 500VAC | KW | 90 |

UL ratings (T≤40°C)

|            |    |     |
|------------|----|-----|
| 220-240VAC | HP | 50  |
| 380-415VAC | HP | 75  |
| 440-480VAC | HP | 100 |

|                             |     |   |
|-----------------------------|-----|---|
| Number of controlled phases | Nr. | 3 |
|-----------------------------|-----|---|

|                 |     |
|-----------------|-----|
| Built-in bypass | Yes |
|-----------------|-----|

|                |        |
|----------------|--------|
| Cooling System | Forced |
|----------------|--------|

### Programming interface

|         |                            |
|---------|----------------------------|
| Display | Backlit LCD 2x16 character |
|---------|----------------------------|

|                                 |    |
|---------------------------------|----|
| Programming with NFC technology | No |
|---------------------------------|----|

|              |    |
|--------------|----|
| Optical port | No |
|--------------|----|

### Startup and stop settings

|                |                                                |
|----------------|------------------------------------------------|
| Startup method | Torque or voltage ramp with current limitation |
|----------------|------------------------------------------------|

|             |                                            |
|-------------|--------------------------------------------|
| Stop method | Torque ramp, voltage ramp, free-wheel stop |
|-------------|--------------------------------------------|

|                |                                |
|----------------|--------------------------------|
| Braking method | DC dynamic with external relay |
|----------------|--------------------------------|

### Protections

|                             |                                                                                                               |
|-----------------------------|---------------------------------------------------------------------------------------------------------------|
| Auxiliary supply protection | Voltage too low<br>No power, phase loss, phase sequence, frequency out of limits, minimum and maximum voltage |
| Power supply Protection     |                                                                                                               |

|                                              |                                                                                                                                                                                                         |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Motor protection                             | Overload at starting (trip class 2, 10A, 10, 15, 20, 25, 30, 35 and 40), overload during running (trip class 2, 10A, 10, 15, 20, 25 and 30), locked rotor, current asymmetry, minimum torque (dry run), |
| Starter protection                           | Overcurrent, overtemperature, bypass failure, phase shorted, temperature sensor fault, maintenance request                                                                                              |
| <b>Functions</b>                             |                                                                                                                                                                                                         |
| Built-in bypass                              | 3                                                                                                                                                                                                       |
| Built-in display and keypad                  | Yes                                                                                                                                                                                                     |
| Languages                                    | Yes                                                                                                                                                                                                     |
| View measurements                            | 4                                                                                                                                                                                                       |
| Torque control                               | Yes                                                                                                                                                                                                     |
| Adjustable current limit                     | Yes                                                                                                                                                                                                     |
| Dynamic braking                              | Yes                                                                                                                                                                                                     |
| Kick Start function                          | Yes                                                                                                                                                                                                     |
| Motor overload electronic protection         | Yes                                                                                                                                                                                                     |
| Motor protection PTC input                   | Yes                                                                                                                                                                                                     |
| Protection against phase loss                | Yes                                                                                                                                                                                                     |
| Protection against phase inversion           | Yes                                                                                                                                                                                                     |
| Protection against locked rotor              | Yes                                                                                                                                                                                                     |
| Protection against thyristor overtemperature | Yes                                                                                                                                                                                                     |
| Protection against low load                  | Yes                                                                                                                                                                                                     |
| Programmable alarm                           | Yes                                                                                                                                                                                                     |
| Digital inputs                               | Yes                                                                                                                                                                                                     |
| Analog inputs                                | Yes                                                                                                                                                                                                     |
| Digital outputs                              | Yes                                                                                                                                                                                                     |
| Analog output                                | Yes                                                                                                                                                                                                     |
| Monitoring communication                     | Yes                                                                                                                                                                                                     |
| Optical port for programming                 | RS323                                                                                                                                                                                                   |
| Event log                                    | No                                                                                                                                                                                                      |
| Motor hour counter                           | Yes                                                                                                                                                                                                     |
| Startup counter                              | Yes                                                                                                                                                                                                     |
| Clock calendar                               | Yes                                                                                                                                                                                                     |
| Remote external keypad                       | Yes                                                                                                                                                                                                     |
| Plug-in version                              | Optional                                                                                                                                                                                                |

#### Input and Output

|                |                         |     |                                               |
|----------------|-------------------------|-----|-----------------------------------------------|
| Digital inputs |                         |     |                                               |
|                | Number of digital input | Nr. | 3 (2 digital inputs + 1 digital/analog input) |

|                        |  |                            |                                                                                                                                                                                                                                                                               |
|------------------------|--|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        |  | Digital input type         | 24VDC (no need for external feeder)                                                                                                                                                                                                                                           |
|                        |  | Digital input functions    | 1 input for start, 1 input programmable (stop, free-wheel stopping, external alarm, motor preheat, local control, alarms inhibit, manual resetting of motor thermal protection, keypad lock, second moto                                                                      |
| <b>Analog inputs</b>   |  |                            |                                                                                                                                                                                                                                                                               |
|                        |  | Number of analog input     | Nr. 1 (digital/analog)                                                                                                                                                                                                                                                        |
|                        |  | Analog input type          | 0-10VDC (0-20mA with external resistor 500Ω)                                                                                                                                                                                                                                  |
|                        |  | Analog input functions     | Motor protection via PTC probes, acceleration and/or deceleration ramp via analog input, analog input thresholds for motor starting and stopping, analog input thresholds for programmable relay enable                                                                       |
| <b>Digital outputs</b> |  |                            |                                                                                                                                                                                                                                                                               |
|                        |  | Number of digital output   | Nr. 4                                                                                                                                                                                                                                                                         |
|                        |  | Digital output arrangement | 3 x 1 NO (SPST) + 1 C/O (SPDT)<br>Ratings: 5A 250VAC AC1, 2A 250VAC AC15<br>C/O output for global alarm, 3 x 1NO outputs programmable (OFF, motor powered, up to speed, braking, current limit, service required, cascade starting, programmable input thresholds, alarm Axx) |
|                        |  | Digital output functions   |                                                                                                                                                                                                                                                                               |
| <b>Analog outputs</b>  |  |                            |                                                                                                                                                                                                                                                                               |

|                         |     |                                                                                  |
|-------------------------|-----|----------------------------------------------------------------------------------|
| Number of analog output | Nr. | 1                                                                                |
| Analog output type      |     | 0...20mA,<br>4...20mA (0...10V<br>with external<br>resistor 500Ω)                |
| Analog output functions |     | Current, torque,<br>motor thermal<br>status, power<br>factor and active<br>power |

### Ambient conditions

#### Temperature

##### Operating temperature

|     |    |                                                           |
|-----|----|-----------------------------------------------------------|
| min | °C | -10                                                       |
| max | °C | +55°C (with<br>current derating<br>>45°C of 1.5%/<br>°C ) |

##### Storage temperature

|     |    |     |
|-----|----|-----|
| min | °C | -30 |
| max | °C | +70 |

#### Max altitude

|   |                                                                                    |
|---|------------------------------------------------------------------------------------|
| m | 1000 without<br>derating (over<br>1000mt with<br>current derating<br>of 0.5%/100m) |
|---|------------------------------------------------------------------------------------|

#### Relative humidity

|   |                                            |
|---|--------------------------------------------|
| % | 95% without<br>condensation or<br>dripping |
|---|--------------------------------------------|

#### Pollution degree

3

### Housing

#### Mounting

Screw-fixing

#### IP degree of protection

IP00

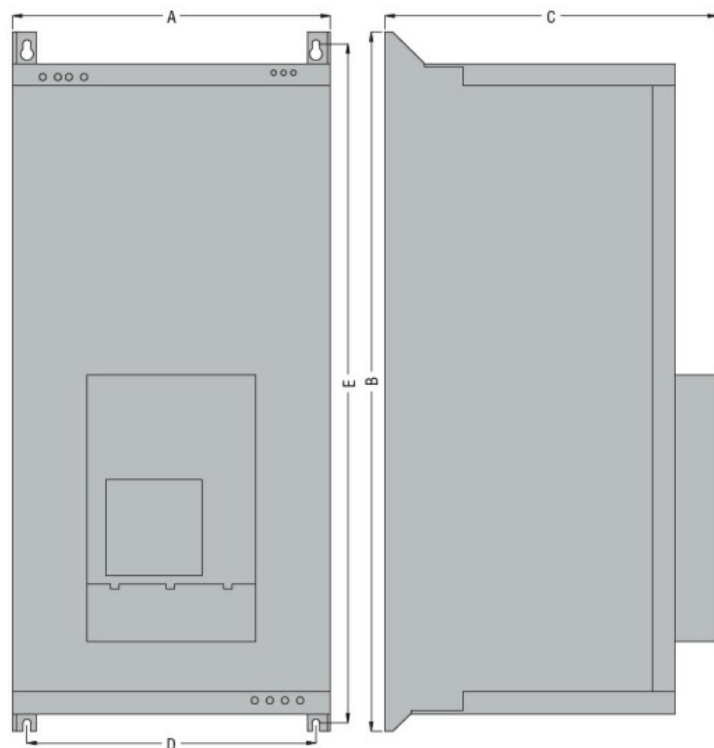
#### Dimensions (W x H x D)

mm 273 x 600 x 285

#### Weight

Kg 28

### Dimensions



| TYPE      | A            | B            | C            | D           | E            |
|-----------|--------------|--------------|--------------|-------------|--------------|
| ADX 0142B | 273 (10.75") | 600 (23.62") | 285 (11.22") | 230 (9.05") | 560 (25.20") |
| ADX 0190B | 273 (10.75") | 680 (26.77") | 310 (12.20") | 230 (9.05") | 640 (25.20") |
| ADX 0245B | 273 (10.75") | 680 (26.77") | 310 (12.20") | 230 (9.05") | 640 (25.20") |

## Certifications and compliance

### Compliance

IEC/EN 60947-1

IEC/EN 60947-4-2

### Certificates

EAC

## ETIM classification

ETIM 8.0

EC000640 - Soft  
starter