# 51ADX0820

SOFT STARTER, ADX... TYPE, FOR SEVERE DUTY (STARTING CURRENT 5•IE). PREDISPOSED FOR EXTERNAL BY-PASS CONTACTOR, 820A



| | | | | |
|---|---|---|---|---|
| Product designation | | | | Soft Starter |
| Product type designation | | | | ADX |
| Motor type | | | | Asynchronous three phase |
| **Electrical features** | | | | |
| Supplies voltage | | | | |
| | | Type of system | | Three phase |
| | | Rated supply voltage | V | 208…415VAC |
| | | auxiliary supply voltage (Us) | | 208…240VAC |
| | | Rated frequency | Hz | 50/60 |
| Rated starter current Ie | | | A | 820 |
| Rated motor power | | | | |
| | IEC ratings (T≤40°C) | | | |
| | | 230VAC | kW | 250 |
| | | 400VAC | kW | 400 |
| | | 500VAC | KW | 600 |
| | UL ratings (T≤40°C) | | | |
| | | 220-240VAC | HP | 300 |
| | | 380-415VAC | HP | 500 |
| | | 440-480VAC | HP | 600 |
| Number of controlled phases | | | Nr. | 3 |
| Built-in bypass | | | | No, predisposed for external bypass contactor |
| 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 |


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| | |
|---|---|
| Power supply Protection | No power, phase loss, phase sequence, frequency out of limits, minimum and maximum voltage |
| 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 |
| **Functions** | |
| Built-in bypass | No |
| Built-in display and keypad | No |
| Languages | 4 |
| View measurements | Yes |
| 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 | 3 |
| Analog inputs | 1 |
| Digital outputs | 4 |
| Analog output | 1 |
| Monitoring communication | Yes |
| Optical port for programming | No |
| Event log | No |
| Motor hour counter | Yes |
| Startup counter | Yes |
| Clock calendar | Yes |

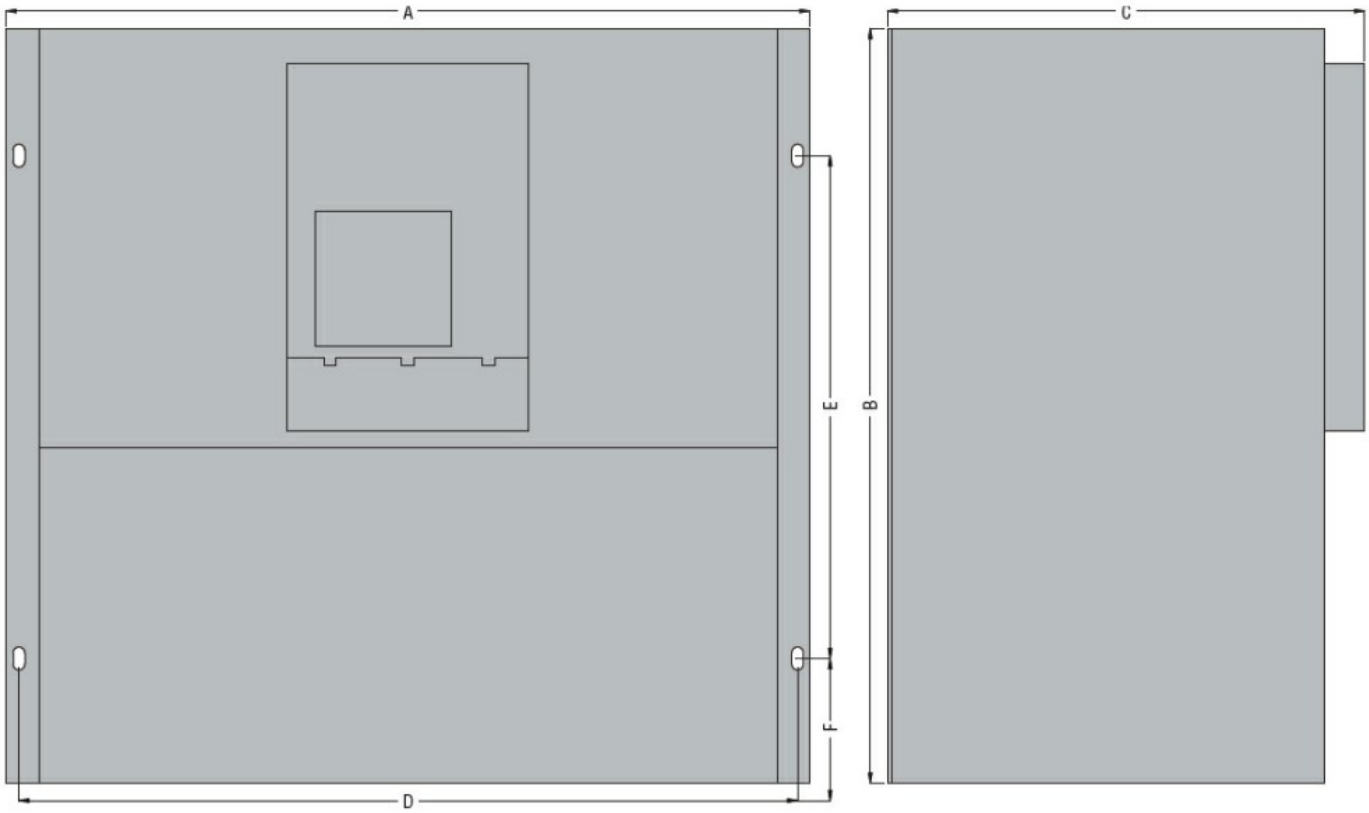

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| | | | |
|---|---|---|---|
| Remote external keypad | | | Yes |
| **Input and Output** | | | |
| Digital inputs | | | |
| | Number of digital input | Nr. | 3 (2 digital inputs + 1 digital/analog input) |
| | Digital input type | | 24VDC (no need for 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 |
| Analog inputs | | | |
| | 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 |
| Digital outputs | | | |
| | Number of digital output | Nr. | 4 |
| | Digital output arrangement | | 3 x 1 NO (SPST) + 1 C/O (SPDT) Ratings: 5A 250VAC AC1, 2A 250VAC AC15 |


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| | | | | |
|---|---|---|---|---|
| | | Digital output functions | | 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) |
| Analog outputs | | | | |
| | | Number of analog output | Nr. | 1 |
| | | Analog output type | | 0...20mA, 4...20mA (0...10V with external resistor 500Ω) |
| | | Analog output functions | | Current, torque, motor thermal status, power factor and active power |
| **Ambient conditions** | | | | |
| Temperature | | | | |
| | Operating temperature | | | |
| | | min | °C | -10 |
| | | max | °C | +55°C (with current derating >45°C of 1.5%/°C ) |
| | Storage temperature | | | |
| | | min | °C | -30 |
| | | max | °C | +70 |
| Max altitude | | | m | 1000 without derating (over 1000mt with current derating of 0.5%/100m) |
| Relative humidity | | | % | 95% without condensation or dripping |
| Pollution degree | | | | 3 |
| **Housing** | | | | |
| Mounting | | | | Screw-fixing |
| IP degree of protection | | | | IP00 |
| Dimensions (W x H x D) | | | mm | 910 x 950 x 442 |
| Weight | | | Kg | 164 |
| **Dimensions** | | | | |


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| TYPE | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| ADX 0310 | 640 (25.20”) | 600 (23.62”) | 380 (14.96”) | 620 (24.41”) | 400 (15.75”) | 100 (3.94”) |
| ADX 0365 | 640 (25.20”) | 600 (23.62”) | 380 (14.96”) | 620 (24.41”) | 400 (15.75”) | 100 (3.94”) |
| ADX 0470 | 790 (31.10”) | 650 (25.59”) | 430 (16.93”) | 770 (30.31”) | 450 (17.72”) | 100 (3.94”) |
| ADX 0568 | 790 (31.10”) | 650 (25.59”) | 430 (16.93”) | 770 (30.31”) | 450 (17.72”) | 100 (3.94”) |
| ADX 0640 | 790 (31.10”) | 650 (25.59”) | 430 (16.93”) | 770 (30.31”) | 450 (17.72”) | 100 (3.94”) |
| ADX 0820 | 910 (35.83”) | 950 (37.40”) | 442 (17.40”) | 830 (32.68”) | 920 (36.22”) | ❶ |
| ADX 1200 | 910 (35.83”) | 950 (37.40”) | 442 (17.40”) | 830 (32.68”) | 920 (36.22”) | ❶ |

❶ Consult Customer Service; see contact details on inside front cover.

## Certifications and compliance

Compliance

| | |
|---|---|
| | IEC/EN 60947-1 |
| | IEC/EN 60947-4-2 |

Certificates

| | |
|---|---|
| | EAC |

## ETIM classification

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|---|---|
| ETIM 8.0 | EC000640 - Soft starter |


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