LOVATO electric
ENERGY AND AUTOMATION

Product designation				Soft Starter
Product type designation				ADX…B
Motor type				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	60
Rated motor power				
	IEC ratings (T≤40°C)			
		230VAC	kW	15
		400VAC	kW	30
		500VAC	KW	37
	UL ratings (T≤40°C)			
		220-240VAC	HP	20
		380-415VAC	HP	30
		440-480VAC	HP	40
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
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), overtemperature , starting too long
Starter protection	Overcurrent, overtemperature, bypass failure, phase shorted, temperature sensor fault, maintenance request

Functions	
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	

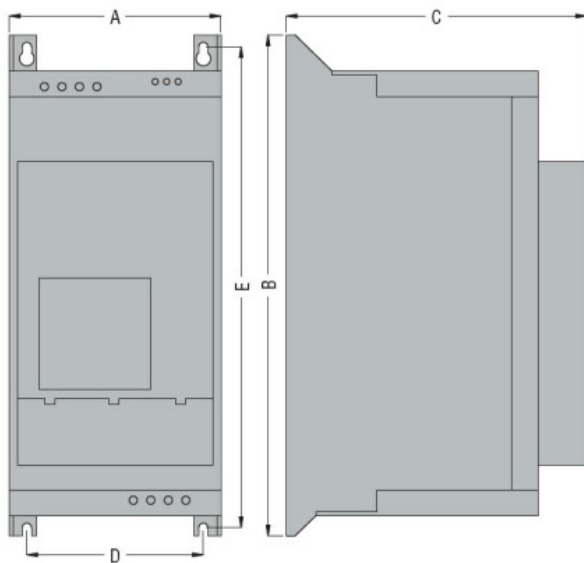|		
Number of digital input	Nr.	3 (2 digital inputs + 1 digital/analog input)
Digital input type		24VDC (no need for external feeder)
Digital input functions		1 input for start, 1 input programmable (stop, free-wheel stopping, external alarm, motor preheat, local control, alarms inhibit, manual resetting of motor thermal protection, keypad lock, second motor), 1 input programmable multifunction (OFF, free-wheel stopping, external alarm, motor preheat, local control, alarms inhibit, manual resetting of motor thermal protection, keypad lock, second motor, cascade starting, 0-10V ramp, 2-10V ramp, 0-10V start-stop, PT100 start-stop, PTC protection)

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 and disable, PT100 input thresholds for motor starting and stopping and PT100 input thresholds for programmable relay enable and disable

Digital outputs

	Number of digital output	Nr.	4
	Digital output arrangement		3 x 1 NO (SPST) + 1 C/O (SPDT)
	Digital output functions		Ratings: 5A 250VAC AC1, 2A 250VAC AC15 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	IP20
Dimensions (W x H x D)	mm	157 x 534 x 250
Weight	Kg	14.2

Dimensions

TYPE	A	B	C	D	E
ADX 0017B	157 (6.18")	372 (14.64")	223 (8.78")	131 (5.16")	357 (14.05")
ADX 0030B	157 (6.18")	372 (14.64")	223 (8.78")	131 (5.16")	357 (14.05")
ADX 0045B	157 (6.18")	372 (14.64")	223 (8.78")	131 (5.16")	357 (14.05")
ADX 0060B	157 (6.18")	534 (21.02")	250 (9.84")	132 (5.20")	517 (20.35")
ADX 0075B	157 (6.18")	534 (21.02")	250 (9.84")	132 (5.20")	517 (20.35")
ADX 0085B	157 (6.18")	534 (21.02")	250 (9.84")	132 (5.20")	517 (20.35")
ADX 0110B	157 (6.18")	584 (22.99")	250 (9.84")	132 (5.20")	567 (22.32")
ADX 0125B	157 (6.18")	584 (22.99")	250 (9.84")	132 (5.20")	567 (22.32")

Certifications and compliance

Compliance

IEC/EN 60947-1

IEC/EN 60947-4-2

Certificates

EAC

ETIM classification

ETIM 8.0	EC000640 - Soft starter