



BCH ELECTRIC LIMITED
we care for you

Soft starter- ASAB



ASAB-Series Soft starter

Soft start/stop static starters for three-phase asynchronous motors.

The ASAB is an advanced digital soft start solution for motors from 7 kW to 800 kW. ASAB soft starters provide a complete range of motor and system protection features and have been designed for reliable performance in the most demanding installation situations.

Technical features & Highlights

Extensive starting and stopping options

- AAC Adaptive Acceleration Control
- Constant current
- Current ramp
- Timed voltage ramp soft stop
- Brake

Models for all connection requirements

- 23 A to 1600 A (nominal)
- 200 VAC to 525 VAC
- 380 VAC to 690 VAC
- Internally bypassed up to 220 A
- In-line or inside delta connection (auto-detect)

Inputs and outputs

- Remote control inputs (3 x fixed, 1 x programmable)
- Relay outputs (3 x programmable)
- Analog output
- Device Net, Modbus or Profi bus communication modules (optional)

Easy-to-read display with comprehensive feedback

- Multi-language feedback
- Multiple status screens and performance graphs
- Date and time stamped event logging
- Operational counters (number of starts, hours run, kWh)
- Performance monitoring (current, voltage, power factor, kWh)
- User-programmable monitoring screen

Customizable protection

- Motor overload
- Excess start time
- Undercurrent
- Instantaneous over current
- Current imbalance

- Mains frequency
- Input trip
- Motor thermistor
- Power circuit
- Phase sequence

Soft Starter - Rating

Modello Model 200-525V	Size	Start per Hour	Bypassed ratings In-line connection				Start per Hour	Bypassed ratings Inside Delta connection			
			300%, 10s Light Dty	350%, 15s	400%, 20s	450%, 30s Hvy Dty		300%, 10s Light Dty	350%, 15s	400%, 20s	450%, 30s Hvy Dty
			N°	Amps	Amps	Amps		Amps	N°	Amps	Amps
ASAB-0023B/5/12/2	G1 no fan	10	23	20	17	15	10	35	30	26	22
ASAB-0043B/5/12/2	G1 no fan	10	43	37	31	26	10	65	59	51	44
ASAB-0053B/5/12/2	G1 no fan	10	53	53	46	37	10	80	80	69	55
ASAB-0076B/5/12/2	G1 no fan	6	76	64	55	47	6	114	96	83	70
ASAB-0097B/5/12/2	G1	6	97	82	69	58	6	146	123	104	87
ASAB-0100B/5/12/2	G1	6	100	88	74	61	6	150	132	112	92
ASAB-0105B/5/12/2	G1	6	105	105	95	78	6	158	158	143	117
ASAB-0145B/5/12/0	G2	6	145	123	106	90	6	218	184	159	136
ASAB-0170B/5/12/0	G2	6	170	145	121	97	6	255	217	181	146
ASAB-0200B/5/12/0	G2	6	200	189	160	134	6	300	283	241	200
ASAB-0220B/5/12/0	G2	6	220	210	178	148	6	330	315	268	223
			Non Bypassed Ratings In-line connection				Non Bypassed ratings Inside delta connection				
ASAB-0255C/5/12/0	G3	6	255	231	201	176	6	383	346	302	264
ASAB-0380C/5/12/0	G4	6	380	380	359	299	6	570	570	539	449
ASAB-0430C/5/12/0	G4	6	430	430	368	309	6	645	645	552	464
ASAB-0620C/5/12/0	G4	6	620	620	540	434	6	930	930	810	651
ASAB-0650C/5/12/0	G4	6	650	650	561	455	6	975	975	842	683
ASAB-0790C/5/12/0	G4	6	790	790	714	579	6	1185	1185	1071	868
ASAB-0930C/5/12/0	G4	6	930	930	829	661	6	1395	1395	1244	992
ASAB-1200C/5/12/0	G5	6	1200	1200	1200	1071	6	1800	1800	1800	1606
ASAB-1410C/5/12/0	G5	6	1410	1410	1319	1114	6	2115	2115	1979	1671
ASAB-1600C/5/12/0	G5	6	1600	1600	1600	1353	6	2400	2400	2400	2030

Product selection chart

Bypass/Non Bypass
B = With Internal Bypass
 Contactor
C = Without Internal Bypass
 Contactor (Continuous)

Control Voltage
12 = 110-120Vac or 220-240Vac
14 = 24Vac/Vdc

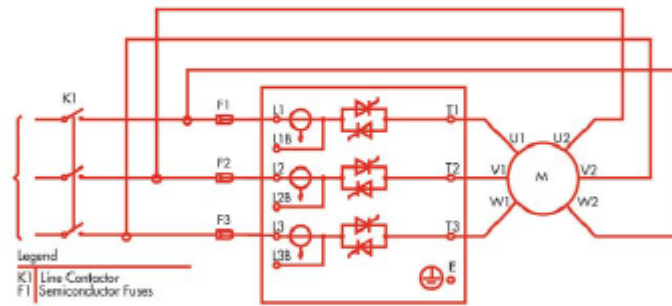
ASAB XXXX B 7 12 2

Ratings - Amps
 Current in Amps e.g. 0023

Mains Voltage
5 = 200-525Vac
7 = 380-690Vac

IP Rating
0 = IP00
2 = IP20

Inside Delta (6 wire connection possibility)



Dimensions and weight

Models	Dimensions WxHxD mm (inches)	Weight kg (lbs)
ASAB-0023B	150x295x183 (5.9"x11.6"x7.2")	4.3 (9.5)
ASAB-0043B	150x295x183 (5.9"x11.6"x7.2")	4.3 (9.5)
ASAB-0053B	150x295x183 (5.9"x11.6"x7.2")	4.3 (9.5)
ASAB-0076B	150x295x183 (5.9"x11.6"x7.2")	4.5 (9.9)
ASAB-0097B	150x295x213 (5.9"x11.6"x8.4")	5.0 (11.0)
ASAB-0100B	150x295x213 (5.9"x11.6"x8.4")	5.0 (11.0)
ASAB-0105B	150x295x213 (5.9"x11.6"x8.4")	5.0 (11.0)
ASAB-0145B	275x438x250 (10.8"x17.2"x9.9")	15 (33.0)
ASAB-0170B	275x438x250 (10.8"x17.2"x9.9")	15 (33.0)
ASAB-0200B	275x438x250 (10.8"x17.2"x9.9")	15 (33.0)
ASAB-0220B	275x438x250 (10.8"x17.2"x9.9")	15 (33.0)
ASAB-0255B	424x440x392 (16.7"x17.3"x15.4")	26 (57.2)
ASAB-0350B	424x440x392 (16.7"x17.3"x15.4")	30.2 (66.6)
ASAB-0425B	424x440x392 (16.7"x17.3"x15.4")	30.2 (66.6)
ASAB-0500B	433x640x600 (17.0"x25.2"x23.6")	49.5 (109.1)
ASAB-0580B	433x640x600 (17.0"x25.2"x23.6")	49.5 (109.1)
ASAB-0700B	433x640x600 (17.0"x25.2"x23.6")	60 (132.3)
ASAB-0820B	433x640x600 (17.0"x25.2"x23.6")	60 (132.3)
ASAB-0920B	433x640x600 (17.0"x25.2"x23.6")	60 (132.3)
ASAB-1000B	433x640x600 (17.0"x25.2"x23.6")	60 (132.3)
ASAB-0255C	390x460x280 (15.4"x18.1"x11.0")	24 (52.9)
ASAB-0380C	430x689x300 (16.9"x27.1"x11.8")	45 (98.1)
ASAB-0430C	430x689x300 (16.9"x27.1"x11.8")	45 (98.1)
ASAB-0620C	430x689x300 (16.9"x27.1"x11.8")	45 (98.1)
ASAB-0650C	430x689x300 (16.9"x27.1"x11.8")	45 (98.1)
ASAB-0790C	430x689x300 (16.9"x27.1"x11.8")	45 (98.1)
ASAB-0930C	430x689x300 (16.9"x27.1"x11.8")	53 (116.8)
ASAB-1200C	585x856x364 (23.0"x33.7"x14.3")	117 (257.9)
ASAB-1410C	585x856x364 (23.0"x33.7"x14.3")	117 (257.9)
ASAB-1600C	585x856x364 (23.0"x33.7"x14.3")	130 (286.6)



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Since product improvement is a continuous process, the data furnished in this brochure may undergo revision without prior notice.



BCH ELECTRIC LIMITED

Soft starter - ASAC





ASACO AND ASAC1 Series Soft Starters

Range 7.5kW - 110kW

Power supply voltage range 200 - 575Vac

COMMON STANDARD FEATURES (ASACO/ASAC1)

- Compact dimensions
- Internal By-pass contactor
- 400% max allowed overload of the nominal current
- Ip20 Enclosure (<=ASAC 55kW)
- 3 Adjustments: Initial start voltage, Start ramp time, Soft stop ramp time
- 6 Indications: No control power, Starter Ready, Starter tripped, Motor not running, Motor running at full speed, Motor starting/stopping
- 3 Alarms: Power circuit, Supply frequency, Communication
- 2 digital inputs: Start, Stop
- 1 Output relay: Main contactor relay
- Local reset
- Control power supply: 110-240Vac and 380-440Vac
- Power supply: 200-440Vac 10% / 200-575Vac 10%



Full Compatibility with
teleservice software
"REMOTE DRIVE" on internet

- Remote Drive

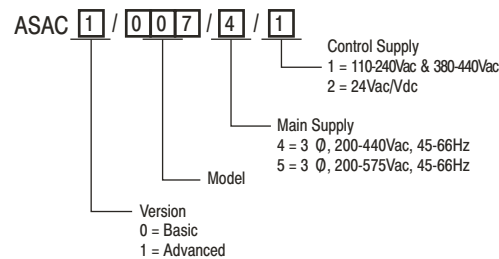
ASAC1 ADDITIONAL FEATURES

- 8 adjustments: Motor FLC, Current Ramp, Current Limit, Motor Trip Class, Soft Stop Time, Excess Start Time, Phase Sequence Protection, Auxiliary Relay Function
- 5 additional Alarms: Excess start time, Motor overload, Motor thermistor, Phase imbalance, Phase sequence
- 1 additional Digital input: Motor thermistor probe
- 1 additional Output relay: Programmable relay

OPTIONS (ASACO/ASAC1)

- 24Vac/Vdc Control Power Supply
- Extra-fast fuses
- RS485 Serial communication port with MODBUS RTU DeviceNet, Profibus, ASI protocol
- Remote control panel (RS485 doubler, one 4-20mA output)
- RS232/485 converter

Model Nomenclature:





ASAC0 AND ASAC1 SOFT STARTER RATINGS:

Soft Starter Model	Applicable Motor Power					FLC* A
	200-240Vac kW	380-415Vac kW	440Vac kW	460-500Vac kW	575Vac kW	
ASAC0/ASAC1 007	4.5	9.2	9.2	11	11	18
ASAC0/ASAC1 015	9.2	15	18.5	18.5	22	34
ASAC0/ASAC1 018	11	18.5	22	22	30	42
ASAC0/ASAC1 022	11	22	30	30	37	48
ASAC0/ASAC1 030	15	30	37	37	45	60
ASAC0/ASAC1 037	22	37	45	45	55	75
ASAC0/ASAC1 045	22	45	55	55	55	85
ASAC0/ASAC1 055	30	55	55	55	75	100
ASAC0/ASAC1 075	45	75	75	90	110	140
ASAC0/ASAC1 090	55	90	90	110	132	170
ASAC0/ASAC1 110	55	110	110	132	160	200
Soft Starter Power Supply	200-440Vac			200-575Vac		

* FLC - Full Load Current

DIMENSIONS:

Model	Dimension WxHxD (mm.)	Weight (Kg.)
ASAC 007	98x203x163	2.1
ASAC 015		
ASAC 018		
ASAC 022		
ASAC 030		
ASAC 037	145x215x191	4.3
ASAC 045		
ASAC 055		
ASAC 075	202x240x212	6.8
ASAC 090		
ASAC 110		



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Other Branch Locations

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Hospet : hospet@bchindia.com, **Hubli :** hubli@bchindia.com, **Madurai :** madurai@bchindia.com, **Vishakapatnam :** vizag@bchindia.com

Resident Engineer Locations

Baddi	Gurgaon	Madurai	Salem
Bardhaman	Haridwar	Muzaffarnagar	Udaipur
Bhilai	Hubli	Nashik	Vapi
Bhubaneswar	Hospet	Patna	Vishakhapatnam
Cochin	Jodhpur	Puducherry	Warangal
Dehradun	Kakinada	Rajkot	
Durgapur	Kota	Rajahmundry	

Since product improvement is a continuous process, the data furnished in this brochure may undergo revision without prior notice.