Product Flyer
ABB High Protection Class Drives
ACS350 UL Type 4X (IP66), 0.5 to 10Hp (0.37 to 7.5kW)

A range of ABB general machinery drives with an UL Type 4X (IP66) protection class is designed to excel in the harshest and most demanding of conditions.

Designed for the food and beverage, textile, ceramics, pulp and paper and water and waste water industries, the drives are suitable for screws, mixers, pumps, fans and conveyers especially where the machine is exposed to dust, moisture and cleaning chemicals. A user control panel housed within a plastic window is designed to resist moist and dusty atmospheres.

The drive is designed for fast installation, parameter setting and commissioning and is based on ABB general machinery drives, possessing the same software features and hardware connections. The wall mounted drive can be located close to the process and the operator.

Highlights

- Smooth, slanted surfaces ensure water drains away and drive will not trap bacteria
- Corrosion resistant die cast aluminum chassis painted in white
- The heat sink's cooling fins are completely open from top to bottom, allowing easy washing
- Optional input switch for fast shutdown, safety and process maintenance
- High torque for the start up of heavy loads
- Internally mounted cooling fan eliminates the need for maintenance of external moving parts
- Built-in brake chopper
- Optional pressure compensation valve for preventing water condensation within the enclosure
- Intuitive use with Advanced Control Panel (as standard)

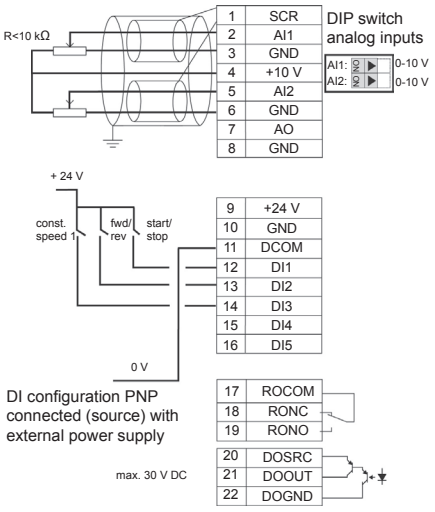
Power and Voltage Range

- 3-phase, 200 to 240 V ± 10% 0.5 to 5Hp (0.37 to 4kW)
- 3-phase, 380 to 480 V ± 10% 0.5 to 10Hp (0.37 to 7.5kW)

Options

- Input switch (Non-fusable)
- Fieldbus connection via optional modules
  - PROFIBUS DP®
  - CANopen
  - DeviceNet™
  - Modbus RTU® (EIA-485)
  - Ethernet IP/Modbus TCP
- FlashDrop tool
- Pressure compensation valve
- Cable gland kit

ACS350 Control Connections



Power and productivity for a better world™

Ratings, types and voltages

Ratings			Type Code	Frame Size
P_N Hp	P_N kW	I_{2N} A		
3-phase supply voltage 200 - 240 V units				
0.5	0.37	2.4	ACS350-03U-02A4-2+B063	R1
0.75	0.55	3.5	ACS350-03U-03A5-2 B063	R1
1	0.75	4.7	ACS350-03U-04A7-2+B063	R1
1.5	1.1	6.7	ACS350-03U-06A7-2+B063	R1
2	1.5	7.5	ACS350-03U-07A5-2+B063	R1
3	2.2	9.8	ACS350-03U-09A8-2+B063	R3
5	4.0	17.6	ACS350-03U-17A6-2+B063	R3
3-phase supply voltage 380 - 480 V units				
0.5	0.37	1.2	ACS350-03U-01A2-4+B063	R1
0.75	0.55	1.9	ACS350-03U-01A9-4+B063	R1
1	0.75	2.4	ACS350-03U-02A4-4+B063	R1
1.5	1.1	3.3	ACS350-03U-03A3-4+B063	R1
2	1.5	4.1	ACS350-03U-04A1-4+B063	R1
3	2.2	5.6	ACS350-03U-05A6-4+B063	R1
5	4.0	8.8	ACS350-03U-08A8-4+B063	R1
7.5	5.5	12.5	ACS350-03U-12A5-4+B063	R3
10	7.5	15.6	ACS350-03U-15A6-4+B063	R3

U = EMC filter disconnected [1)]
+B063 = UL Type 4X (IP66) enclosure

[1)] In case the EMC filter is required, it can easily be connected

Motor connection	
Voltage	3-phase, from 0 to U_{SUPPLY}
Frequency	0 to 500 Hz
Overload capacity (at a max. ambient temperature of 40 °C)	1.5 x I_{2N} for 1 minute every 10 minutes At start 1.8 x I_{2N} for 2 s
Switching frequency	
Default	4 kHz
Selectable	4 to 16 kHz with 4 kHz steps
Speed control	
Static accuracy	20% of motor nominal slip
Dynamic accuracy	< 1% s with 100% torque step
Torque control	
Torque step rise time	< 10ms with nominal torque
Non-linearity	± 5% with nominal torque
Programmable control connections	
Two analog inputs:	
Voltage signal	
Unipolar	0 (2) to 10 V, R_{in} > 312 kΩ
Bipolar	-10 to 10 V, R_{in} > 312 kΩ
Current signal	
Unipolar	0 (4) to 20 mA, R_{in} = 100 Ω
Bipolar	-20 to 20 mA, R_{in} = 100 Ω
Potentiometer reference value	10 V ±1% max. 10 mA, R < 10 kΩ
Resolution	0.1%
Accuracy	±1%
One analog output	0 (4) to 20 mA, load < 500 Ω
Auxiliary voltage	24 V DC ±10%, max. 200 mA

Five digital inputs	12 to 24 V DC with internal or external supply, PNP and NPN, pulse train 0 to 16 kHz
Input impedance	2.4 kΩ
One relay output	
Type	NO + NC
Maximum switching voltage	250 V AC/30 V DC
Maximum switching current	0.5 A/30 V DC; 5 A/230 V AC
Maximum continuous current	2 A rms
One digital output	
Type	Transistor output
Maximum switching voltage	30 V DC
Maximum switching current	100 mA/30 V DC, short circuit protected
Frequency	10 Hz to 16 kHz
Resolution	1 Hz
Accuracy	0.2%
Product compliance	
CE, NSF certified, UL	
Environmental limits	
Degree of protection	UL Type 4X (IP66), indoor use only
Ambient temperature	-10 to 40 °C (14 to 104 °F), no frost allowed

For more information see technical catalog
ABB general machinery drives ACS350-PHTC01U-EN

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