

BlueLine Control Cabinet Type 8984A and 8985A

- Control Cabinet with transparent front door
- For maximum 64 respectively 96 switching signals (e. g. valve gates)
- Incl. 1 BlueLine I/O Master type 8980C
- Incl. 1 - 6 BlueLine I/O Expander type 8981A
- Galvanic separation from Bus-In/Out
- Galvanic separation from inputs/outputs of other modules
- Protection against Short-circuit and overvoltage



Description

PRIAMUS sensors automatically detect in real-time when the plastic melt reaches a sensor during the injection process. This way, valve gates can be controlled depending on the process and viscosity variations can be compensated. Methods based on time, stroke, and pressure do not offer this option and are virtually flying blind.

This method which directly controls the melt flow is suitable for a number of applications such as the automatic sequential control, automatic venting, and melt flow controlled injection compression processes. The generated switching signals are usually directly connected with the machine interface in order to open or close the valve gates.

In many cases, these interfaces are mounted outside of the machine for which PRIAMUS has developed a number of solutions. With multi-cavity molds it is often necessary to provide a number of switching signals systematically and in order. For this purpose, several control cabinet solutions have been created which vary in dimension and in number of switching signals.

Variants

The BlueLine Control Cabinets types 8984A and 8985A are available in different versions. All versions contain 1 BlueLine I/O Master and 1 to a maximum of 6 BlueLine I/O Expanders.

Type 8984A

Type	I/O Master	I/O Expander	Housing Colour	Power Supply Unit Type 9005B
8984Axx-1	1	1	RAL 9003	installed
8984Axx-1-sp			RAL XXXX	installed / separate
8984Axx-2		2	RAL 9003	installed
8984Axx-2-sp			RAL XXXX	installed / separate
8984Axx-3		3	RAL 9003	installed
8984Axx-3-sp			RAL XXXX	installed / separate
8984Axx-4		4	RAL 9003	installed
8984Axx-4-sp			RALXXXX	installed / separate

Type 8985A

Type	I/O Master	I/O Expander	Housing Colour	Power Supply Unit Type 9005B
8985Axx-1	1	1	RAL 9003	installed
8985Axx-1-sp			RAL XXXX	installed / separate
8985Axx-2		2	RAL 9003	installed
8985Axx-2-sp			RAL XXXX	installed / separate
8985Axx-3		3	RAL 9003	installed
8985Axx-3-sp			RAL XXXX	installed / separate
8985Axx-4		4	RAL 9003	installed
8985Axx-4-sp			RALXXXX	installed / separate
8985Axx-5		5	RAL 9003	installed
8985Axx-5-sp			RALXXXX	installed / separate
8985Axx-6		6	RAL 9003	installed
8985Axx-6-sp			RALXXXX	installed / separate

To be specified when ordering:

- Cable length xx (possible cable length: 1 - 15 meters)
- sp types: Chose the housing colour with the RAL number (e. g. RAL6029)
- sp types: Chose if the power supply unit should be installed into the control cabinet or delivered separately.

Technische Daten

General

Properties	Specification
Dimensions (L x W x H)	Type 8984A : 152 × 500 × 600 mm Type 8985A : 152 × 600 × 600 mm
Weight (incl. connecting cable)	~ 50 kg
Working temperature range	0 ... 50 °C
Storage temperature range	-40 ... 80 °C
Assembly	Mounting bore hole
ESD protection	4 kV
Protection class	IP55
RoHS-compliant	Yes

Power Supply Unit

Properties	Specification
Supply voltage range	88 ... 264 V
Supply frequency range	47 ... 63 Hz
Output voltage	24 V
Max. power	3 A
Short-circuit-proof	Yes

Power Supply Inputs / Outputs

Properties	Specification
Voltage range	18 ... 36 V
Standby current consumption per module	< 100 mA
Max. current consumption per module	8 A
Power supply via bus	No
Electrically separated from Bus In / Out	Yes
Electrically separated from inputs / outputs within the module	No
Electrically separated from inputs / outputs of other modules	Yes

Digital Outputs

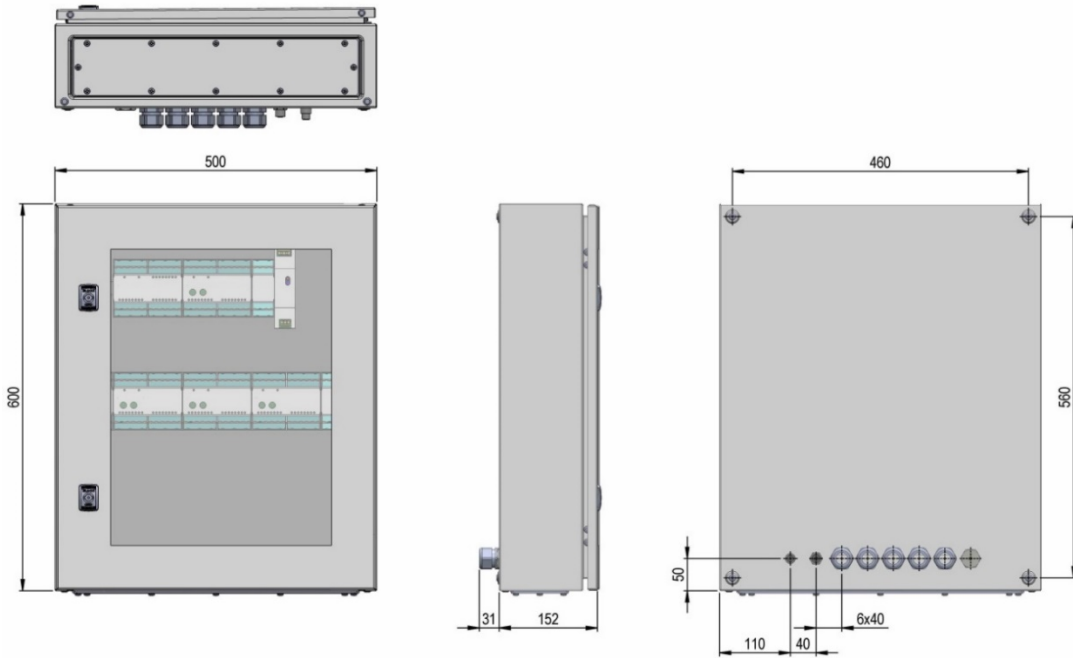
Properties	Specification
Continuous current (at 25 °C)	2 A
Peak current (self-limiting)	6 A
Short-circuit-proof	Ja
Rated switching voltage	8 ... 36 V
Surge protection (load dump)	52 V
Potential difference (at 2A load)	0.4 V
Leakage current	< 10 µA
Switch-on delay	< 180 µs
Switch-off delay	< 200 µs
Maximum switchable inductance (at 2A load)	< 20 mH
Status display on output HIGH	Green
Status display on error (surge, short-circuit against 24 V)	Red

Digital Inputs

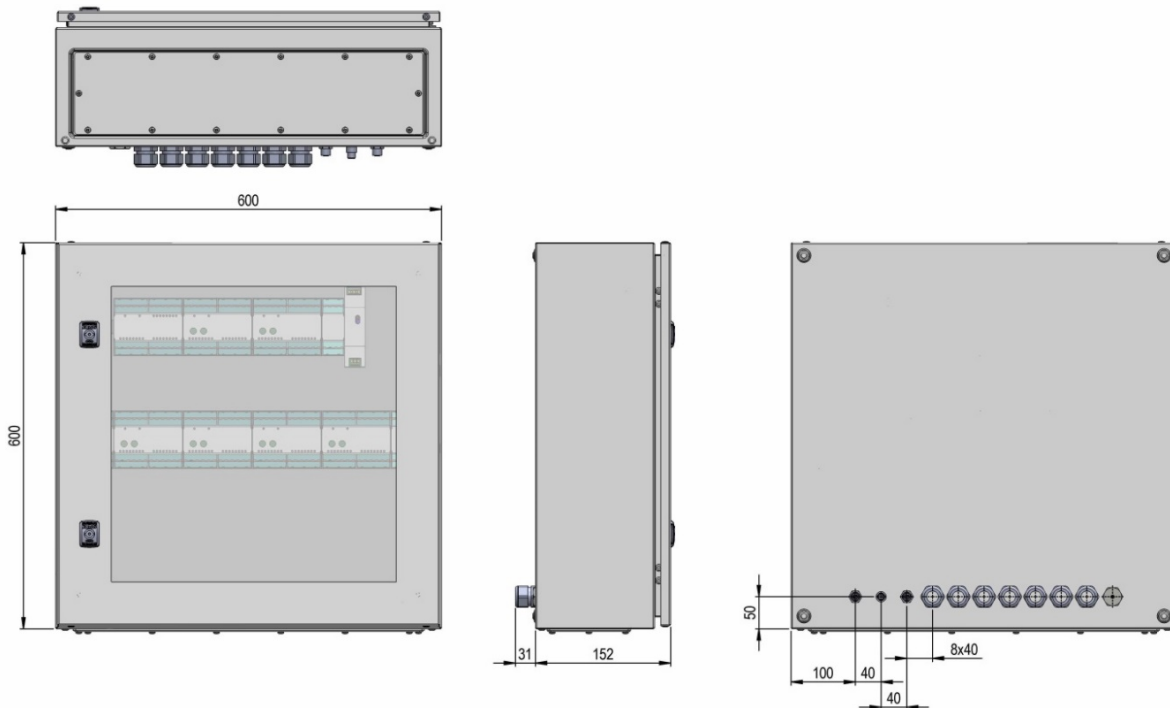
Properties	Specification
Max. voltage	52 V
Logic level for HIGH	> 3 V
Logic level for LOW	< 1.5 V
Current consumption	> 3 mA
Status display on input HIGH	Green

Dimensions (in mm)

Type 8984A



Type 8985A



Scope of Delivery

Article	Type
1 × BlueLine I/O Master	8980C
Type 8984A : 1 - 4 BlueLine I/O Expander Type 8985A : 1 - 6 BlueLine I/O Expander (has to be specified when ordering)	8981A
1 × BlueLine power supply unit	9005B

Accessories

Type number	Article
1041Ax	BlueLine connection cable for cavity pressure sensors Single-pin, with plastic sheath Both sides: Fischer connector type S 102 pos. TRIAX
1043Bx	BlueLine extension cable for cavity pressure sensors With metal sheath Side 1: Fischer connector type S 102 pos. TRIAX Side 2: Fischer connector type KBE 102 neg. TRIAX
1045Bx	BlueLine connection cable for cavity pressure sensors Multi-pin, with plastic sheath Side 1: Fischer connector type S 104 neg., 16-pin (Code 1) Side 2: 4 × Fischer connector type S 102 pos. TRIAX
1047Ax	BlueLine connection cable for cavity pressure sensors Multi-pin, with plastic sheath Side 1: Fischer connector type S 104 neg., 16-pin (Code 1) Side 2: Fischer connector type S 102 pos. TRIAX
1049Bx	BlueLine connection cable for cavity pressure sensors Single-pin, with plastic sheath Both sides: Fischer connector type S 102 pos. TRIAX
1054Bx	BlueLine connection cable for cavity pressure sensors Multi-pin, with plastic sheath Both sides: Fischer connector type S 104 neg., 16-pin (Code 1)
1141Ax	BlueLine connection cable for cavity temperature sensors Single-pin, with plastic sheath Both sides: Fischer connector type S 101 pos. TRIAX
1142Bx	BlueLine extension cable for cavity pressure sensors

Type number	Article
	Single-pin, with metal sheath Side 1: Fischer connector type S 101 pos. TRIAX Side 2: Fischer connector type KBE 101 neg. TRIAX
1144Ax	BlueLine connection cable for cavity temperature sensors Multi-pin, with plastic sheath Both sides: Fischer connector type S 104 neg. 19-pin (Code 2)
1145Ax	BlueLine connection cable for cavity temperature sensors Multi-pin, with plastic sheath Side 1: Fischer connector type S 104 neg. 19-pin (Code 2) Side 2: Fischer connector type S 101 pos. TRIAX
1147Bx	BlueLine connection cable for cavity temperature sensor Multi-pin, with plastic sheath Side 1: Fischer connector type S 104 neg. 19-pin (Code 2) Side 2: 4 × Fischer connector type S 101 pos. TRIAX
1149Bx	BlueLine connection cable for cavity temperature sensors Single-pin, with metal sheath Both sides: Fischer connector type S 101 pos. TRIAX
1194A-8T	BlueLine multi-channel connecting box for temperature signals For connecting a maximum of 8 cavity temperature sensors
1195A-8p	BlueLine multi-channel connecting box for pressure signals For connecting a maximum of 8 cavity pressure sensors
5070A-2p2T-VARAN	BlueLine pressure and temperature amplifier VARAN Pressure: 2 × Single-channel connectors Fischer type 102 TRIAX / BNC Temperature: 2 × Single-channel connectors Fischer type 102 TRIAX
5080A-4p	BlueLine amplifier for cavity pressure signals with 4 channels 4 × single-channel connectors Fischer type 102 TRIAX
5080A-16p	BlueLine amplifier for cavity pressure signals with 16 channels 2 × multi-channel connectors Fischer type 104, 16-pin
5080A-4T	BlueLine amplifier for cavity temperature signals with 4 channels 4 × single-channel connectors Fischer type 101 TRIAX
5080A-16T	BlueLine amplifier for cavity temperature signals with 16 channels 2 × multi-channel connector Fischer type 104, 19-pin
8280C	BlueLine Core Control unit for monitoring and controlling of the injection molding process
8911A	BlueLine signal tester set Test device for checking cavity temperature and cavity pressure sensors.

Type number	Article
	Complete set with numerous accessories in foam case
8952A	BlueLine signal tester Test device for checking cavity temperature and cavity pressure sensors.
8980C	BlueLine I/O Master Basic module for transmitting control signals between the injection molding machine and the BlueLine system.
8981A	BlueLine I/O Expander Extension module for transmitting control signals between the injection molding machine and the BlueLine system.
8982A	BlueLine Bus Interface Coupling module between I/O modules for mounting on top hat rail bus, for transmitting control signals between the injection molding machine and the BlueLine system.
8983A	BlueLine Voltage input module For collecting voltage signals of the injection molding machine
8984A	BlueLine control cabinet Control cabinet with transparent front door for maximum 64 switching signals With 1 BlueLine I/O Master type 8980C and optionally 1–4 BlueLine I/O Expander type 8981A
8985A	BlueLine control cabinet Control cabinet with transparent front door for maximum 96 switching signals with 1 BlueLine I/O Master type 8980C and optionally 1–6 BlueLine I/O Expander type 8981A
9015A	BlueLine inductive switch for easy starting and measuring
9016A	BlueLine power supply unit for: - BlueLine amplifiers types 5080A - BlueLine Core type 8280C
9080A	BlueLine top hat rail bus For mounting of several interconnected BlueLine devices such as I/O Master or I/O Expander