



Machine Protection Door RapidProtect[™]300

Protection and Safety for Automated Processes



Machine Protection Door RapidProtect™300



ADVANTAGES OF ALBANY RAPIDPROTECT™ 300

The new generation of Albany Machine Protection Doors offers significant improvements:

- Service friendly: Two-pieced aluminium side frames offer easy access for inspection and maintenance.
- Pre-running photocell: in combination with control system MCC^{VectorControl}
 a pre-running photocell is available as option. It provides more comfort
 and higher speed.
- Integrated cable chain: The cables of the electrical safety contact edge are guided in cable chains inside the side frame.
- Pluggable cables in the cable chain.
- Drive unit: A chain drive is available as option in case of space limitations.
- Short cycle times: up to 5 cycles per minute is possible.

Thanks to its design and small number of parts the RapidProtect™300 is rugged, reliable and easy to install. It allows short cycle times and can be installed in machines, in production lines and safety fences. The roller door can be installed at short distance from the machine due to its stable, wind load resistant door curtains, which also protect against direct pressure.

DESIGN

The side frames are made of two aluminium profiles. The front cover can easily be removed and allows easy access for inspection and maintenance. Integrated safety limit switches link the door with the machine. As an option, transparent covers in front of the safety limit switches facilitate monitoring the switches.

DOOR CURTAIN

Various designs and colours are available depending on the application (see table). For use in welding systems we recommend the use of RollTex® or NomaTex® curtains to protect against sparks. Optional anti-UV welding windows that conform to EN 1598 are also available. Side-mounted wind tabs reduce inward bending of the door blade.

DRIVE UNIT

Gear motor with drop down safety gearbox, mounted on the right or left side of the door position, can be varied in steps of 45°. Standard placement vertically downwards.

CONTROL

Depending on the application there are 2 control systems (ACS 50/MCC^{VectorControl}) which offer a broad spectrum of speeds, power supplies and options for connecting control and safety devices. On request the door can also be delivered without control system.

MANUAL ACTIVATION

During a power failure the door can be opened manually using a hand crank.

OPTIONS

There are various options for this type of door, such as: safety limit switches on selectable stop positions (x-level) e.g. for conveyor systems, motor position turned in steps of 45° or chain drive.

CYCLE TIME

Doors of the RapidProtectTM 300 series are specially designed for short cycle times with their flexible curtains and high speeds.

		V ^	company of Albany International Corp.
Technical Data	RapidProtect™ 300		
Door dimension (mm)	For details please note general drawing!		
DW min./max.	750 / 4000 mm		
DH min./max.	750 / 3500 mm		
Opening direction	vertical		
Surface			
Side frame	Aluminium		
Bottom profile	Aluminium		
Top roll	Aluminium		
Covers			
Top roll cover		● 1)	
Motor cover		•	
Door curtain (alternative	lv)		
	ex® RollTex®	NomaTex®	PVC with coloured
Plus*		*/**	reinforcement stripes
Blue ✓	• Original	•	•
Orange •	•	•	•
Grey	•	•	
Yellow	-	•	•
Red		•	•
		•	•
White			•
Black		201 2 2	•
*optional with window /	**optional	with vision	panels
Wind tabs		V	
Drive unit		electrical	
Motor power / kW		0,75 kW	
Chain drive		•	
Control systems	A	ACS 50 / MC	CvectorControl
Safety			
Electrical safety contact e	dge	✓	
Door line photocell		✓	
Pre-running photocell (on combination with control system MCC ^{VectorControl} , doc photocell is optinal)	,	•	
Drop down protection		✓ in driv	ve unit
Speed (m/s)	-	ACS 50	MCCVectorControl
Open/close up to max.	1	,0/1,0	2,4 / 1,3
Open/close up to max. with M and pre-running photocel			2,4 / 1,8
Fuse protection	1	0 A ²⁾	10 A ³⁾
Typical cycle number/min.	r	nax.1	max. 5*
3L/(N)PE/220/230/380/400/415V; 50Hz		/ 4)	
3L/(N)/PE/380/400/415/440/480	V; 50/60Hz		√ 5)
Control voltage	•	24 V DC	24 V DC
Protection		P 55	IP 55
✓Standard • Option	U		55
1) For doors of height < 2300 m required according to standar			S

 ¹⁶ A at 220/230V.
 10 A recommended, 16 A max.
 Transformer necessary for 440/480/500 V.

⁵⁾ Transformer necessary for 220/230/500 V.

^{*)} Specific number of cycles on request.

Machine Protection Door RapidProtect™ 300 With a fully type tested Safety Concept.



APPLICATION

- · Automatic welding systems
- Cutting systems
- Milling machines
- Painting systems
- Workpiece handling
- Tool handling
- Presses
- Conveyor systems
- Elevator and high-bay storage systems

ADVANTAGES OF ALBANY RAPIDPROTECT™ 300

- Suitable for universal use indoors
- Rapid opening and closing ensures short cycle times
- Space-saving construction offers a multitude of applications
- Cost-savings due to quick and easy installation
- Protection against flying sparks, dust, noise or welding splatter
- Personnel protection in danger zones
- Safety limit switches according to EN ISO 13849-1 and EN 62061
- Doors conform to EN ISO 12100 and EN 1088
- Flexible, tear-resistant, stretch-resistant door curtains
- RollTex® curtain with a guarantee up to 5 years (optional)
- Microprocessor control system allows individual programming to meet customer special needs
- Versions conforming to various factory standards are possible
- High reliability even after years of high numbers of cycles
- Optional: Drive unit position can be chosen in steps of 45°
 - Chain drive
 - Bracket for floor mounting
- Extensition box: Space saving extension box for MCC^{VectorControl} allows mounting of interface card or safety monitoring module for safety limit switches.

CONNECTING TO THE MACHINE

- Potential-free safe contacts for "Door closed"
- Output "Door open"
- Output "Door closed"
- Output "Fault"
- Machine is controlling the door by potential-free contacts

SAFETY LIMIT SWITCHES

- Safety limit switches according to: PL d/Kat. 3 and PL e/Kat. 4 (EN ISO 13849-1), SIL 3 (EN 62061)
- Delivered with safety monitoring module as standard
- Optional evaluation by safety systems of the machine (version without safety monitoring module)
- Optional transparent covers for safety limit switches Due to the use of safety limit switches, machine protection doors cannot be equipped with a knock-out mechanism.

SAFETY FEATURES

This door is designed according to the regulations of the Work-place Directive of the UVV as well as the harmonized CE Guidelines including the EN 13241-1 and 98/37/EG.

INDICATION OF RISK

The security of the door is designed for normal use for vehicles in industrial environment corresponding to the harmonized CE-Guidelines. Next to this, special environmental conditions may have impact on the right choice of doortype. In case of any doubt, please contact our sales engineer to receive consulting in your application.



Drive unit position can be chosen in steps of 45°.



Integrated cable chain guides cables for pre-running photocell or elecrical safety contact edge inside the side frame.



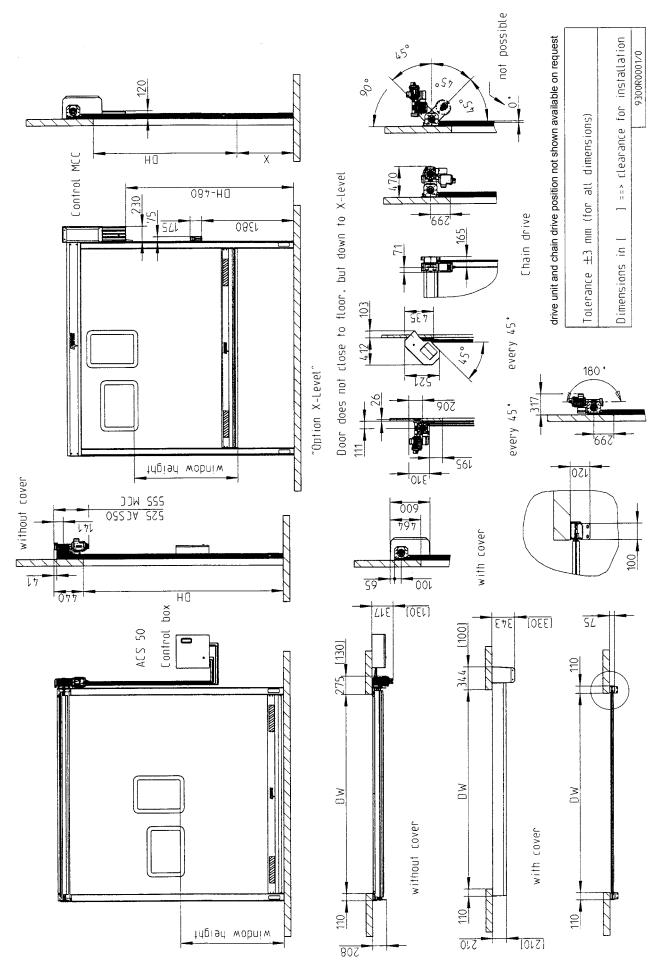
Pre-running photocell in combination with control system MCC^{VectorControl}.



Option: transparent cover for safety limit switches allows easy inspection of the switches

Products shown may include optional accessories.





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Machine Protection Door RapidProtect™300



SIDE FRAME

Made of two aluminium profiles.

MOTOR COVER

Made of a steel plate painted in aluminium colour.

CONTROL BOX

Two control systems are available depending on the opening speed, power supply and cycle time requirements.

SAFETY FEATURES

The bottom profile is monitored by an electrical safety contact edge. A door line photocell also prevents the door from closing when objects are interfering. As option the door can be equipped with a pre-running photocell in combination with control system MCC Vector Control.

SAFETY LIMIT SWITCHES

For the indication "door safely closed," safety limit switches according to PL d/Kat. 3 and PL e/Kat. 4 (EN ISO 13849-1), SIL 3 (EN 62061) are integrated in the side frame.



TOP ROLL

Aluminium top roll with steel shafts.

TOP ROLL COVER 1)

Made of aluminium.

MOTOR POSITION

Motor can be fitted on the right- or lefthand side.

DOOR CURTAIN

Optional: RollTex®, NomaTex® or transparent PVC curtains with coloured reinforcement stripes. All door curtains are silicon-free.

COLOURS

Standard: Blue Option: Orange, grey, yellow, red, white, black.

WINDOWS

For process monitoring when the door is closed, various window variants are optionally available

Products shown may include optional accessories.

Note

 $^{1)}$ For doors of height < 2300 mm the use of top roll cover is required according to standard EN 13241-1.



TWO-PIECED ALUMINIUM SIDE FRAMES



Two-pieced aluminium side frames offer easy access for inspection and maintenance.

OPTIONAL: FLOOR MOUNTING BRACKETS



The door can be mounted freestanding on floor with optional mounting brackets. Levelling screws allow adjustment by uneven floor.

DOOR CURTAIN



Depending on the application, various door curtains are available: from partially transparent PVC curtains with a high degree of transparency to highly rigid RollTex® and NomaTex® variants.

OPTIONAL WINDOWS



On PVC curtains with coloured reinforcement strips, there are large viewing areas. For all other variants of curtains, optional horizontal or vertical windows are integrated in the door curtain. As an alternative to this, there are also variants with anti-UV windows.



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