

Ramp Controls



Ramp Controls

Technical data

	RS 301	RS 200 L
On-site supply	180-440 V/3~/N/PE/50/60 Hz	230 V/3~/50 Hz; 400 V/3~/50 Hz
Mains frequency [Hz]	50/60	
Control voltage [V]	24 V-DC	
Load capacity Power (max.) [kW]	2.2	
Switching current (max.) [A]	6.3	
Current consumption per valve (max.) [A]	0.6	
Protection class	IP65	
Temperature (min./max.) [°C]	-10/55	
Dimensions (WxHxD) [mm]	215x275x190	

	RS 200 L + CS 320	RS 200 L + CS 265
On-site supply	230 V/3~/50 Hz; 400 V/3~/50 Hz	
Mains frequency [Hz]	50/60	
Control voltage [V]	24 V-DC	
Switching current gate control (max.) [A]	8	5
Switching current ramp control (max.) [A]	6.3	5
Load capacity power gate control (max.) [kW]	2.2	1.5
Load capacity Ramp control power (max.) [kW]	2.2	
Current consumption per valve (max.) [A]	0.6	
Protection class	IP65	
Temperature (min./max.) [°C]	-10/45	
Dimensions (WxHxD) [mm]	245x455x190	

	RS 301 K + CS 265	RS 301 V + CS 265	RS 301 K + CS 320	RS 301 V + CS 320
On-site supply	180-440 V/3~/N/PE/50/60 Hz			
Mains frequency [Hz]	50/60			
Control voltage [V]	24 V-DC			
Switching current gate control (max.) [A]	5		8	
Switching current ramp control (max.) [A]	5		6.3	
Load capacity power gate control (max.) [kW]	1.5		2.2	
Load capacity Ramp control power (max.) [kW]	2.2			
Current consumption per valve (max.) [A]	0.8			
Protection class	IP65			
Temperature (min./max.) [°C]	-10/45			
Dimensions (WxHxD) [mm]	245x455x190		260x550x245	

Ramp Controls

RS 200



The basic control unit for dock levellers RS 200 is used exclusively for controlling dock levellers with a folding wedge and a valve. Although limited in its range of functions, the RS 200 has a start-up interlock, phase failure detection, integrated overload protection and the possibility of interlocking by an external gate control as standard.

Features

Functions

- For controlling a dock leveller with a folding wedge
- Control of 1-valve units
- Phase failure detection
- Start-up interlock after power failure
- Release/locking by external gate control

Operation

- Circuit board push button „Lift
- 1 red LED for status indication

Structure and connection

- Integrated main switch
- Integrated fuses for the hydraulic power unit (standard: 4 A, on request 6.3 A)
- Switchable transformer from 230 V/1~/3~ to 400 V/3~
- Short-circuit proof extra-low voltage
- Connection for locking the dock leveller
- Low case bottom
- Integrated cover hinges
- Adjustable, preassembled wall brackets
- Cable tunnel for connecting lines

Ramp Controls

RS 301



The RS 301 comfort control for dock levellers is used to control dock levellers with a flap wedge or feed lip. The range of functions is optimally adapted to the requirements in this area and offers the user a large number of connection options in order to be able to solve even complex control tasks easily. Programming is carried out via the proven LC display.

Two delivery variants are available:

RS 301 K - for the control of a leveller with flap wedge and 1 or 2 valves

RS 301 V - for controlling a leveller with feed lip and 2 or 3 valves

Features

Functions

- Start-up interlock after power failure
- Rotary field test/phase failure detection
- 1 programmable input with 4 functions
- 8 valve versions for feed lip and 4 for flap wedge actuation
- Control of the gate sealing (Shelter function)
- Release/locking by external gate control
- Enabling/locking the automatic gate
- Auto Return
- Cycle counter

Operation

- Auto return button
- Pluggable LC display with plain text display
- Status and diagnostic messages

Structure and connection

- Integrated main switch
- Integrated fuses for the hydraulic power unit (standard: 4 A, on request 6.3 A)
- Short-circuit proof extra-low voltage
- Power supply for external devices (24 V-DC/250 mA)
- Connection of indoor and outdoor traffic lights
- Connection of wheel wedge and start-up sensor
- Connection of loading light or signal horn
- Connection for emergency stop
- Connection for locking the dock leveller
- Connection for locking the gate system
- All connections are pluggable
- Low case bottom
- Integrated cover hinges
- Adjustable, preassembled wall brackets
- Cable tunnel for connecting lines

Ramp Controls

RS 200 +

RS 200 + CS 265



The RS 200 + control unit is a combination of the RS 200 basic control unit for dock levellers and the CS 265 comfort control unit for door systems. In combination, it offers the option of controlling the dock leveller and door centrally and linking them together. In addition to the simple range of functions of the RS 200 for dock levellers, the complex door functions of the CS 265 can also be implemented.

Features

- 1 programmable relay output with 44 functions
- 2 programmable inputs with 27 functions
- Changing the direction of rotation via circuit board push button/display
- Adjustable power limitation for both running directions (only with AWG)
- Rotation direction monitoring and detection (only with AWG)
- Integrated gate run counter
- Integrated error memory (readout of all error messages indicating frequency and cycle of last occurrence) only with LCD monitor
- For controlling a dock leveller with a folding wedge
- Control of 1-valve units
- Phase failure detection
- Start-up interlock after power failure
- Release/locking by external gate control

End position setting

- Via mechanical limit switches (MEC) and/or via absolute encoders (AWG)
- Setting via circuit board push button or plug-in LCD monitor

Operation

- 1 direction button/3-series push button gate control
- Pluggable LC display with plain text display
- 3-button navigation/status and diagnostic messages

Structure and connection

- Integrated main switch
- Integrated fuses for the hydraulic power unit (standard: 4 A, on request 6.3 A)
- Switchable transformer from 230 V/1~/3~ to 400 V/3~
- Supply for external devices (24 V-DC/200 mA)
- Short-circuit proof extra-low voltage
- Connection for elements of the safety circuit
- Connection for closing edge protection (opto, 8.2 kOhm, pressure wave bar or leading light barrier) in CLOSE direction
- Connection for 2 light barriers (2-wire, relay, NPN, PNP) with/without testing
- Connection for 2 light grid systems with/without testing
- Slot for 2-channel radio transmission system for wireless signal transmission of closing edge system and/or safety circuit (only in conjunction with CS 320)

Optional

- LCD monitor with plain text display
- Customized cover lamination
- Control in steel cabinet

Ramp Controls

RS 200 +

RS 200 + CS 320



The RS 200 + control system is a combination of the RS 200 basic control system for dock levellers and the CS 320 comfort control system for door systems. In combination, it offers the possibility of centrally controlling and linking dock levellers and gates. In addition to the simple range of functions of the RS 200 for dock levellers, the complex gate functions of the CS 320 can also be implemented.

Features

- 4 programmable relay outputs with 44 functions
- 2 programmable inputs with 27 functions
- Changing the direction of rotation via circuit board push button/display
- Adjustable power limitation for both running directions (only with AWG)
- Rotation direction monitoring and detection (only with AWG)
- Integrated gate run counter
- Integrated error memory (readout of all error messages indicating frequency and cycle of last occurrence) only with LCD monitor
- For controlling a dock leveller with a folding wedge
- Control of 1-valve units
- Phase failure detection
- Start-up interlock after power failure
- Release/locking by external gate control

End position setting

- Via mechanical limit switches (MEC) and/or via absolute encoders (AWG)
- Setting via circuit board push button or plug-in LCD monitor

Operation

- 1 direction button/3-series push button gate control
- Pluggable LC display with plain text display
- 3-button navigation/status and diagnostic messages

Structure and connection

- Integrated main switch
- Integrated fuses for the hydraulic power unit (standard: 4 A, on request 6.3 A)
- Switchable transformer from 230 V/1~/3~ to 400 V/3~
- Supply for external devices (24 V-DC/500 mA and 230 V-AC/1 A)
- Short-circuit proof extra-low voltage
- Connection for elements of the safety circuit
- Connection for closing edge protection (opto, 8.2 kOhm, pressure wave bar or leading light barrier) in CLOSE direction
- Connection for 2 light barriers (2-wire, relay, NPN, PNP) with/without testing
- Connection for 2 light grid systems with/without testing
- Slot for 2-channel radio transmission system for wireless signal transmission of closing edge system and/or safety circuit (only in conjunction with CS 320)

Optional

- LCD monitor with plain text display
- Customized cover lamination
- Control in steel cabinet

Ramp Controls

RS 301 +

RS 301 + CS 265



RS 301 V + CS 265

The RS 301 + control unit is a combination of the RS 301 comfort control unit for dock levellers and the CS 265 comfort control unit for door systems. In combination, it offers the option of controlling the dock leveller and door centrally and linking them together. A complex range of functions is available for the dock leveller and door, optimally matched to the requirements in these areas. Programming is carried out via the tried and tested LC display.

Two delivery variants are available:

RS 301 K + CS 265 - for controlling a dock leveller with hinged wedge and 1 or 2 valves (combination housing)

RS 301 V + CS 265 - for controlling a dock leveller with feed lip and 2 or 3 valves (combi housing)

Features

Door control – Functions:

- 1 programmable relay output with 44 functions
- Integrated cycle counter/goal counter
- 2 programmable inputs with 27 functions (gate)
- Changing the direction of rotation via platinum pushbutton/display
- Adjustable force limit for both running directions (only with AWG)
- Rotation direction monitoring and detection (only with AWG)
- Integrated error memory (readout of all error messages indicating frequency and cycle of last occurrence) only with LCD monitor

Ramp control – Functions:

- For controlling a dock leveller with a folding wedge
- Control of 1- or 2-valve units
- 4 Ventilversionen für Klappkeilansteuerung
- Start-up interlock after power failure
- Rotary field test/phase failure detection
- 1 programmable input with 4 functions (bridge)
- Control of the gate sealing (shelter function)
- Enabling/locking the automatic gate
- Release/locking by external gate control
- Auto Return

End position setting:

- Via mechanical limit switches (MEC) and/or via absolute encoders (AWG)
- Setting via platinum pushbutton or plug-in LCD monitor

Operation:

- 1 Direction key
- 3-fold push button gate control
- Auto return button
- Pluggable LC display with plain text display
- 3-button navigation/status and diagnostic messages

Structure and connection

- Integrated main switch
- Integrated fuses for the hydraulic power unit (standard: 4 A, on request 6.3 A)
- Switchable transformer from 230 V/1~/3~ to 400 V/3~
- Supply for external devices (RS: 24 V-DC/250 mA; CS: 24 V-DC/200 mA)
- Short-circuit proof extra-low voltage
- Connection of indoor and outdoor traffic lights
- Connection of wheel wedge and start-up sensor
- Connection of loading light or signal horn
- Connection for locking the dock leveller
- Connection for locking the gate system
- Connection for elements of the safety circuit
- Connection for closing edge protection (opto, 8.2 kOhm, pressure wave bar or leading light barrier) in CLOSE direction

Optional

- Automatic return
- Control in steel cabinet

Ramp Controls

RS 301 +

RS 301 + CS 320



RS 301 V + CS 320

The RS 301 + control unit is a combination of the RS 301 convenience control unit for dock levellers and the CS 320 convenience control unit for door systems. In combination, it offers the possibility to centrally control and link dock levellers and gates. A complex range of functions is available for dock levellers and gates, optimally matched to the requirements in these areas. Programming is carried out via the proven LC display.

Two delivery variants are available:

RS 301 K + CS 320 - for the control of a dock leveller with flap wedge and 1 or 2 valves (maxi housing)

RS 301 V + CS 320 - for controlling a leveller with feed lip and 2 or 3 valves (maxi housing)

Features

- 4 programmable relay outputs with 44 functions
- Integrated cycle counter/goal counter
- 2 programmable inputs with 27 functions (gate)
- Changing the direction of rotation via circuit board push button/display
- Adjustable power limitation for both running directions (only with AWG)
- Rotation direction monitoring and detection (only with AWG)
- Integrated error memory (readout of all error messages indicating frequency and cycle of last occurrence) only with LCD monitor
- Start-up interlock after power failure
- Rotary field test/phase failure detection
- 1 programmable input with 4 functions (bridge)
- 8 valve versions for feed lip and 4 for flap wedge actuation
- Control of the gate sealing (Shelter function)
- Enabling/locking the automatic gate
- Release/locking by external gate control
- Auto Return

End position setting

- Via mechanical limit switches (MEC) and/or via absolute encoders (AWG)
- Setting via circuit board push button or plug-in LCD monitor

Operation

- 3-series push button gate control
- Auto return button
- Pluggable LC display with plain text display
- 3-button navigation/status and diagnostic messages

Structure and connection

- Integrated main switch
- Integrated fuses for the hydraulic power unit (standard: 4 A, on request 6.3 A)
- Switchable transformer from 230 V/1~/3~/ to 400 V/3~/
- Power supply for external devices (RS: 24 V-DC/250 mA; CS: 24 V-DC/500 mA and 230 V-AC/1 A)
- Short-circuit proof extra-low voltage
- Connection of indoor and outdoor traffic lights
- Connection of wheel wedge and start-up sensor
- Connection of loading light or signal horn
- Connection for locking the dock leveller
- Connection for locking the gate system
- Connection for elements of the safety circuit
- Connection for closing edge protection (opto, 8.2 kOhm, pressure wave bar or leading light barrier) in CLOSE direction

Optional

- Automatic return
- Control in steel cabinet

Accessories for Controls

Emergency Power Buffers



Article

Item no.	Description	Price
188601	Emergency power buffer 230 V/2000 VA in housing	Emergency power buffer 230 V/2,000 VA 1497.00 €

Area of use

For STA 1 operators with CS 320 FU controls

Features

- In the event of a mains voltage failure, the emergency power buffer system automatically switches on and supplies the door control unit and operator. As soon as the mains voltage is available again, the door control unit and operator are supplied again via the mains and the accumulators of the emergency power buffer are charged
- Simple commissioning according to the plug & play principle: battery buffer and door control are connected directly via Schuko plug. No additional control cable required between battery and door control
- When the accumulator is fully charged, a door cycle can be guaranteed for a period of one hour

Technical data

	Emergency power buffer 230 V/2000 VA
Input voltage [V]	220-240 V-AC
Output voltage [V]	230 V/1~
Output power [kW]	1.4
Mains frequency [Hz]	50/60
Protection class	IP44
Temperature (min./max.) [°C]	0/40
Dimensions (WxHxD) [mm]	600x400x210

Accessories for Fire protection Controls

Emergency Power Buffers



Article

Item no.	Description	Price
188365	Emergency power buffer 400 V/6000 VA Emergency power buffer 400 V/6,000 VA in housing	5120.00 €

Area of use

- For operators MDF 05 to MDF 70 with CS 320 controls

Features

- In the event of a mains voltage failure, the emergency power buffer system automatically switches on and supplies the door control unit and operator. As soon as the mains voltage is available again, the door control unit and operator are supplied again via the mains and the accumulators of the emergency power buffer are charged
- Simple commissioning according to the plug & play principle: Battery buffer and door control are connected directly via CEE plug. No additional control cable between battery and door control necessary
- Can be retrofitted to existing systems
- Pure sine wave output
- When the accumulator is fully charged, a door cycle can be guaranteed for a period of one hour

Technical data

	Emergency power buffer 400 V/6000 VA
Input voltage [V]	400 V/3~
Output voltage [V]	400 V/3~
Output power [kW]	5.4
Mains frequency [Hz]	50
Protection class	IP32
Temperature (min./max.) [°C]	0/40
Dimensions (WxHxD) [mm]	260x720x892