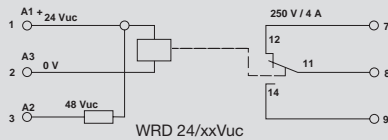
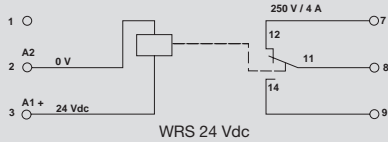
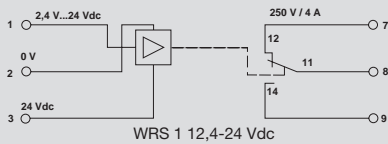


WAVESERIES

1 change-over contact



Output

Max. switching voltage AC/Continuous current	250V/5A
Min. switching power	100mA/5Vdc
Response time / Release time	7ms/6ms
Contact base material	Ag alloy
Mechanical endurance	20x10^6 switching cycles
Max. switching frequency at rated load	0.1Hz

Rated data

Status indicator/Free wheel diode/Reverse volt. prot.	LED green/Yes/available
Ambient temp., fitted w. distance	-25 °C...+50 °C
Storage temperature	-40 °C...+60 °C
Climate	40°C/93% rel. humidity without condensation
Approvals	UL / CSA

Insulation coordinates (EN 50 178)

Standards	EN 50178
Rated voltage	300 V
Impulse withstand voltage	6 kV (1.2/50 μ)
Creepage and clearance path input - output	=>5.5mm
Overtoltage category	III
Pollution severity	2
Secure separation acc. to VDE 0106 Part 101	Yes

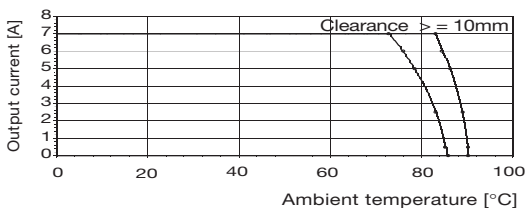
Dimensions

	Screw connection	Tension clamp connection
Clamping range (rating- / min. / max.)	mm ² 1.5 / 0.5 / 2.5	
Length x width x height	mm 72.0 / 22.5 / 92.4	

Information

Applications

Mounted horizontally



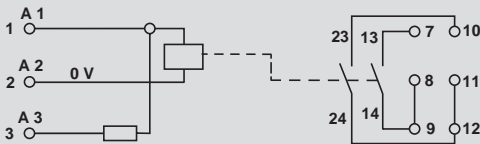
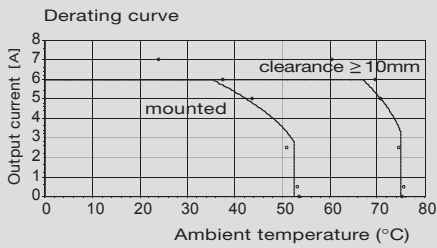
WAVESERIES

1 change-over contact

Ordering data	2.4-24VDC 1CO	24VDC 1CO	24/48VUC 1CO	24/60VUC 1CO
Input				
Rated voltage	2.4...24 Vdc +/- 10 %	24 Vdc +/- 10 %	24 Vuc // 48 Vuc, +/- 10 %	24 Vuc // 60 Vuc, +/- 10 %
Rated current AC			approx. 14mA	approx. 11mA
Rated current DC	4.6mA	9mA	14 mA	approx. 10mA
Power rating	200 mW	220mW	0.35VA(W) // 0.5VA(W)	0.22W / 0.34VA // 0.6W / 0.7VA
Oper.-/drop-out volt. AC-coil			16 V/9.5 V // 29 V/15 V	16 V/9.5 V // 31 V/20 V
Oper.-/drop-out volt. DC-coil	1.9 V	16 V/7.5 V	16 V/9.5 V // 29 V/15 V	15 V/8.5V // 34 V/15 V
Pull-in curr./release curr. AC-coil			9 mA/4.5 mA // 8.3mA/4.1mA	5.6mA/2.3mA // 5.6mA/2.1mA
Pull-in curr./release curr. DC-coil	3.88mA	5.7 mA/2.2 mA	9 mA/4.5 mA // 8.3mA/4.1mA	5.8 mA/3.9 mA // 5.6 mA/3.4 mA
Ordering data Complete module				
Screw connection Type	WRS1 2.4-24VDC 1U	WRS1 24VDC 1U	WRS1 24/48VUC 1U	WRS1 24/60VUC 1U
Order No.	8275320000	8275350000	8286280000	8418210000
Tension clamp connection Type				
Order No.				
Ordering data Spare relay, pluggable				
Type				
Order No.				
Information				
Ordering data	24/115VUC 1CO	24VUC/230VAC 1CO		
Input				
Rated voltage	24 Vuc // 115 Vuc, +/- 10 %	24 Vuc // 230 Vac, +/- 10 %		
Rated current AC	approx. 11mA	approx. 15mA		
Rated current DC	approx. 10mA	14mA (24Vdc)		
Power rating	0.22W / 0.34VA // 1.2W / 1.3VA	0.34VA / 0.32W // 3.5VA		
Oper.-/drop-out volt. AC-coil	15 V/12 V // 60 V/34 V	13 V/9 V // 115 V/66 V		
Oper.-/drop-out volt. DC-coil	16V/8.5V // 64V/26V	13 V/9 V (24Vdc)		
Pull-in curr./release curr. AC-coil	5.8mA/3.9mA // 5.5mA/3mA	7.5 mA/4.7 mA // 7.4 mA/4.3 mA		
Pull-in curr./release curr. DC-coil	5.6mA/2.3mA // 5.7mA/2.2mA	7.5 mA/4.7 mA		
Ordering data Complete module				
Screw connection Type	WRS1 24/115VUC 1U	WRS1 24VUC/230VAC 1U		
Order No.	8418220000	8418230000		
Tension clamp connection Type				
Order No.				
Ordering data Spare relay, pluggable				
Type				
Order No.				
Information				

WAVESERIES

2 NO contacts



Output	
Max. switching voltage AC/Continuous current	250V/5A
Min. switching power	100mA/5Vdc
Response time / Release time	5ms/6ms
Contact base material	AgSnO2
Mechanical endurance	50x10^6 switching cycles
Max. switching frequency at rated load	0.1Hz
Rated data	
Status indicator/Free wheel diode/Reverse volt. prot.	LED green/Yes/available
Ambient temp., fitted w. distance	-25 °C...+50 °C
Storage temperature	-40 °C...+60 °C
Climate	40°C/93% rel. humidity without condensation
Approvals	UL / CSA
Insulation coordinates (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Impulse withstand voltage	6 kV (1.2/50 µ)
Creepage and clearance path input - output	=>8mm
Overvoltage category	III
Pollution severity	2
Secure separation acc. to VDE 0106 Part 101	Yes

Dimensions	Screw connection	Tension clamp connection
Clamping range (rating- / min. / max.)	mm² 1.5 / 0.5 / 2.5	
Length x width x height	mm 92.4 / 22.5 / 112.4	

Information

Ordering data

Input

Rated voltage	12 Vdc // 24 Vdc, +/- 10 %
Rated current AC	
Rated current DC	approx. 20mA
Power rating	0.24W // 0.5W
Oper.-/drop-out volt. AC-coil	
Oper.-/drop-out volt. DC-coil	7.5 V / 3.5 V // 14.5 V / 6.1 V
Pull-in curr./release curr. AC-coil	
Pull-in curr./release curr. DC-coil	10 mA / 4.2 mA // 10 mA / 4 mA

12/24VDC 2A

24/48VUC 2A

Rated voltage	24 Vuc // 48 Vuc, +/- 10 %
Rated current AC	approx. 11mA
Rated current DC	approx. 8.5mA
Power rating	0.17W / 0.21VA // 0.4W / 0.48VA
Oper.-/drop-out volt. AC-coil	13.5 V / 9 V // 24 V / 16 V
Oper.-/drop-out volt. DC-coil	16 V / 7.8 V // 28 V / 12 V
Pull-in curr./release curr. AC-coil	4.4 mA / 2.7 mA // 4.3 mA / 2.6 mA
Pull-in curr./release curr. DC-coil	4.3 mA / 1.6 mA // 4.4 mA / 1.6 mA

115VUC/230VAC 2A

Rated voltage	115 Vuc // 230 Vac, +/- 10 %
Rated current AC	approx. 10mA
Rated current DC	9mA (115Vdc)
Power rating	1VA / 0.9W // 2.5VA
Oper.-/drop-out volt. AC-coil	58 V / 22 V // 110 V / 40 V
Oper.-/drop-out volt. DC-coil	54 V / 20 V (115Vdc)
Pull-in curr./release curr. AC-coil	4.8 mA / 1.7 mA V // 5 mA / 2 mA
Pull-in curr./release curr. DC-coil	4 mA / 2 mA

Ordering data

Complete module

Screw connection	Type
Order No.	
Tension clamp connection	Type
Order No.	

WRS2 12/24VDC 2A
8418240000

WRS2 24/48VUC 2A
8418250000

WRS2 115VUC/230VAC 2A
8418260000

Ordering data

Spare relay, pluggable

Type	
Order No.	

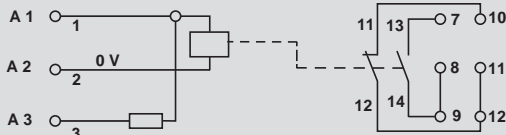
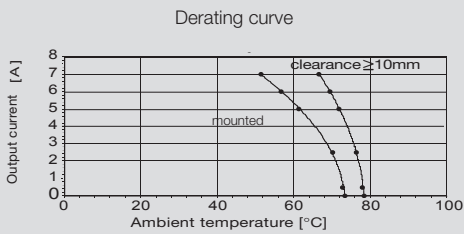
Information

WAVESERIES

1 NC contact / 1 NO contact



Relay coupler



Output	
Max. switching voltage AC/Continuous current	250V/5A
Min. switching power	100mA/5V
Response time / Release time	7ms/5ms
Contact base material	AgSnO2
Mechanical endurance	50x10^6 switching cycles
Max. switching frequency at rated load	0.1Hz
Rated data	
Status indicator/Free wheel diode/Reverse volt. prot.	LED green/Yes/available
Ambient temp., fitted w. distance	-25 °C...+50 °C
Storage temperature	-40 °C...+60 °C
Climate	40°C/93% rel. humidity without condensation
Approvals	UL / CSA
Insulation coordinates (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Impulse withstand voltage	6 kV (1.2/50 μ)
Creepage and clearance path input - output	=>8mm
Overvoltage category	III
Pollution severity	2
Secure separation acc. to VDE 0106 Part 101	Yes

Dimensions	Screw connection	Tension clamp connection
Clamping range (rating- / min. / max.)	mm²	1.5 / 0.5 / 2.5
Length x width x height	mm	92.4 / 22.5 / 112.4

Information

Ordering data

Input	12/24VDC 1A 1R	24/48VUC 1A1R	115VUC/230VAC 1A 1R	
Rated voltage	12 Vdc // 24 Vdc, +/- 10 %	24 Vuc // 48 Vuc, +/- 10 %	115 Vuc // 230 Vac, +/- 10 %	
Rated current AC		approx. 11mA	approx. 10mA	
Rated current DC	approx. 20mA	approx. 8.5mA	9mA (115Vdc)	
Power rating	0.24W // 0.5W	0.17W / 0.21VA // 0.4W / 0.48VA	1VA / 0.9W // 2.5VA	
Oper.-/drop-out volt. AC-coil		13.5 V / 9 V // 24 V/16 V	58 V / 22 V // 110 V/40 V	
Oper.-/drop-out volt. DC-coil	7.5 V / 3.5 V // 14.5 V/6.1 V	13.5 V / 9 V // 24 V/16 V	54 V / 20 V (115Vdc)	
Pull-in curr./release curr. AC-coil		4.4 mA/2.7 mA // 4.3 mA/1.6 mA	4.8 mA/1.7 mA // 5 mA/2 mA	
Pull-in curr./release curr. DC-coil	10 mA/4.2 mA // 10 mA/4 mA	4.3 mA/1.6 mA // 4.4 mA/1.6 mA	4 mA/1.6 mA	

Ordering data

Complete module				
Screw connection	Type	WRS2 12/24VDC 1A1R	WRS2 24/48VUC 1A1R	WRS2 115VUC/230VAC 1A1R
	Order No.	8418270000	8418280000	8418290000
Tension clamp connection	Type			
	Order No.			

Ordering data

Spare relay, pluggable				
	Type			
	Order No.			

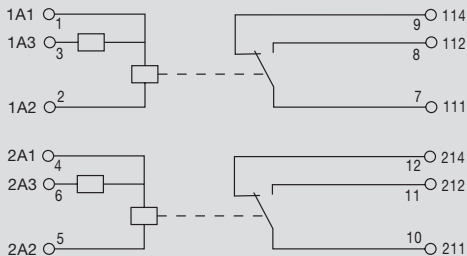
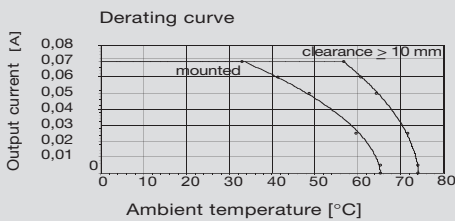
Information

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WAVESERIES

2 change-over contacts



Output	
Max. switching voltage AC/Continuous current	250V/5A
Min. switching power	100mA/5Vdc
Response time / Release time	6ms/10ms
Contact base material	Ag alloy
Mechanical endurance	20x10 ⁶ switching cycles
Max. switching frequency at rated load	0.1Hz
Rated data	
Status indicator/Free wheel diode/Reverse volt. prot.	LED green/Yes/available
Ambient temp., fitted w. distance	-25 °C...+50 °C
Storage temperature	-40 °C...+60 °C
Climate	40°C/93% rel. humidity without condensation
Approvals	UL / CSA
Insulation coordinates (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Impulse withstand voltage	6 kV (1.2/50 μ)
Creepage and clearance path input - output	=>5.5mm
Overvoltage category	III
Pollution severity	2
Secure separation acc. to VDE 0106 Part 101	Yes

Dimensions	Screw connection	Tension clamp connection
Clamping range (rating- / min. / max.)	mm ² 1.5 / 0.5 / 2.5	
Length x width x height	mm 92.4 / 22.5 / 112.4	

Information

Ordering data

Input

Rated voltage	12 Vdc // 24 Vdc, +/- 10 %
Rated current AC	
Rated current DC	approx. 23mA
Power rating	0.26W // 0.53W
Oper.-/drop-out volt. AC-coil	
Oper.-/drop-out volt. DC-coil	8.5 V / 3 V // 15 V/4.8 V
Pull-in curr./release curr. AC-coil	
Pull-in curr./release curr. DC-coil	15.2 mA/5.7 mA // 15.3 mA/5.6 mA

12/24VDC 2CO

24/48VUC 2CO

24 Vuc // 48 Vuc, +/- 10 %
approx. 15mA
14 mA
0.35VA(W) // 0.7VA(W)
16V/9.5V // 29V/15V
9 mA/4.5 mA // 8.3mA/4.1mA
9 mA/4.5 mA // 8.3mA/4.1mA

24VUC/230VAC 2CO

24 Vuc // 230 Vac, +/- 10 %
approx. 15mA
14mA (24Vdc)
0.35W // 3.45VA
13 V/9 V // 115 V/66 V
13 V/9 V (24Vdc)
7.5 mA/4.7 mA // 7.4 mA/4.3 mA
7.5 mA/4.7 mA

Ordering data

Complete module

Screw connection	Type
Order No.	
Tension clamp connection	Type
Order No.	

WRS2 12/24VDC 2U

8418300000

WRS2 24/48VUC 2U

8418310000

WRS2 24VUC/230VAC 2U

8418320000

Ordering data

Spare relay, pluggable

Type
Order No.

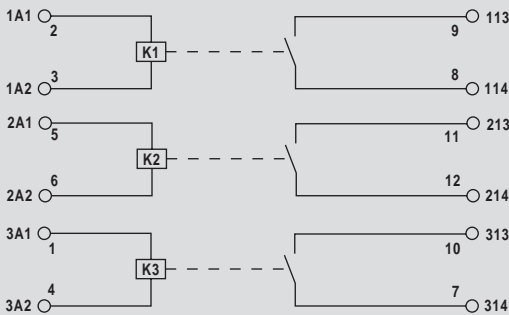
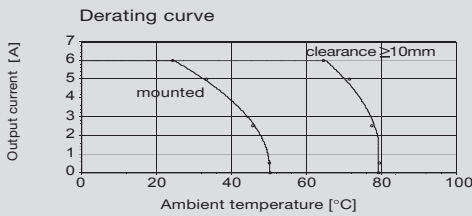
Information

WAVESERIES

3 NO contacts



Relay coupler



Output	
Max. switching voltage AC/Continuous current	250V/4A
Min. switching power	12V/10mA
Response time / Release time	5ms/21ms
Contact base material	AgSnO2
Mechanical endurance	20x10^6 switching cycles
Max. switching frequency at rated load	0.1Hz
Rated data	
Status indicator/Free wheel diode/Reverse volt. prot.	LED green/No/hot available
Ambient temp., fitted w. distance	-25 °C...+50 °C
Storage temperature	-40 °C...+60 °C
Climate	40°C/93% rel. humidity without condensation
Approvals	UL / CSA
Insulation coordinates (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Impulse withstand voltage	6 kV (1.2/50 μ)
Creepage and clearance path input - output	=>5.5mm
Overvoltage category	III
Pollution severity	2
Secure separation acc. to VDE 0106 Part 101	Yes

Dimensions	Screw connection	Tension clamp connection
Clamping range (rating- / min. / max.)	mm²	1.5 / 0.5 / 2.5
Length x width x height	mm	92.4 / 22.5 / 112.4

Information

Ordering data

Input	24VUC 3A	230VAC 3A		
Rated voltage	24 Vuc +/- 10 %	230 Vac +/- 10 %		
Rated current AC	10.4mA	10.3mA		
Rated current DC	10.5mA			
Power rating	0.3VA // 0.25W	2.4VA		
Oper.-/drop-out volt. AC-coil	12.8 V / 5 V	207V/207V/207V		
Oper.-/drop-out volt. DC-coil	12.8 V / 5 V			
Pull-in curr./release curr. AC-coil	6.6 mA / 2.1 mA	9mA		
Pull-in curr./release curr. DC-coil	6.5 mA / 1.4 mA			

Ordering data Complete module

Screw connection	Type	WRS2 24VUC 3A	WRS2 230VAC 3A		
Order No.		8418330000	8418340000		
Tension clamp connection	Type				
Order No.					

Ordering data Spare relay, pluggable

Type				
Order No.				

Information

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