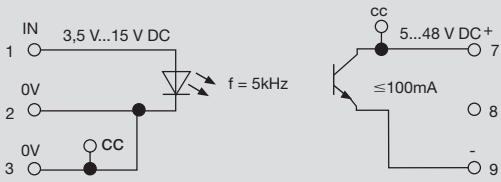


Optos - WAVESERIES

**Output voltage 5-48 V DC
wide input range**



C



Output	
Output voltage	5 V DC ... 48 V DC
Output current (max.)	100 mA
Voltage drop at max. load	
Block-state curr. (closed-circuit curr.)	
Switch-on delay/Switch-off delay	8 µs/35 µs
Short-circuit-proof/Protective circuit	no/Varistor, integral free-wheel diode
General data	
Operating temperature	-25°C...+60°C
Storage temperature	-40 °C...+85 °C
Approvals	CSA;cURus;CE;
Insulation coordination (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Rated impulse withstand voltage	6.0 kV
Creepage and clearance path input - output	≥ 5.5 mm
Surge category	III
Pollution severity	2

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 / 22.5 / 92.4	

Note Cross-connectors and markers - see WAVESERIES accessories

Ordering data

Input	3.5-15 V DC 5 KHZ			
Rated voltage	3.5 V DC...15 V DC			
Rated current	10 ... 25 mA			
Power rating	32 ... 375 mW			
Auxiliary voltage	no			
Status indicator	LED green in output			

Ordering data Complete module				
Screw connection Type	WOS1 3.5-15VDC 5KHZ			
Order No.	8275390000			
Tension clamp connection Type				
Order No.				

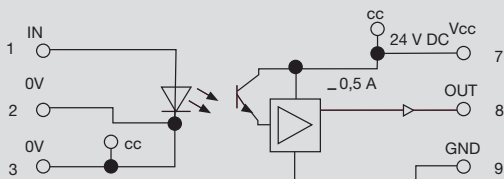
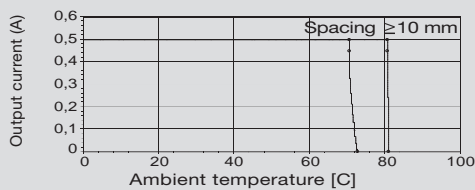
Ordering data Spare relay, pluggable				
Type				
Order No.				

Note				

**Output voltage 24 V DC 0.5 A
short-circuit-proof and protected
against overload**



Derating curve



Output	
Output voltage	12 V DC ... 24 V DC... 28 V DC
Output current (max.)	500 mA
Voltage drop at max. load	
Block-state curr. (closed-circuit curr.)	
Switch-on delay/Switch-off delay	approx. 10 ms/approx. 20 ms
Short-circuit-proof/Protective circuit	Yes/max. 96 h/Varistor, polarity reversal protection
General data	
Operating temperature	-25°C...+60°C
Storage temperature	-40 °C...+85 °C
Approvals	CSA;cURus;CE;
Insulation coordination (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Rated impulse withstand voltage	6.0 kV
Creepage and clearance path input - output	≥ 5.5 mm
Surge category	III
Pollution severity	2
Dimensions	
Clamping range (rating- / min. / max.)	mm ² 1.5 / 0.5 / 2.5
Length x width x height	mm 72 / 22.5 / 92.4
Note	
Cross-connectors and markers - see WAVESERIES accessories	

Ordering data

Input	12 V UC / 24 V DC 0.5 A	15-60 V DC 1 kHz	115 V UC / 24 V DC 0.5 A	230 V UC / 24 V DC 0.5 A
Rated voltage	10 V DC...12 V DC...14 V DC	15 V DC...60 V DC	115 V UC, max. 130 V UC	230 V UC, max. 250 V UC
Rated current	15 mA AC / 12 mA DC	1.4 ... 4.1 mA	2,9 mA AC / 3,1 mA DC	11,5 mA AC / 1,8 mA DC
Power rating	0.18 VA / 0.14 W	21 ... 246 mW	0.16 VA / 0.23 W	2,6 VA / 0.4 W
Auxiliary voltage	no	no	no	no
Status indicator	LED green in output	LED green in output	LED green in output	LED green in output

Ordering data Complete module				
Screw connection Type	WOS1 12VUC	WOS1 15-60VDC 1KHZ	WOS1 115VUC	WOS1 230VUC
Order No.	8275500000	8237730000	8235180000	8275380000
Tension clamp connection Type				
Order No.				
Ordering data Spare relay, pluggable				
Type				
Order No.				
Note				

Optos - WAVESERIES

**Output voltage 24 V DC 5 A
short-circuit-proof and protected
against overload**

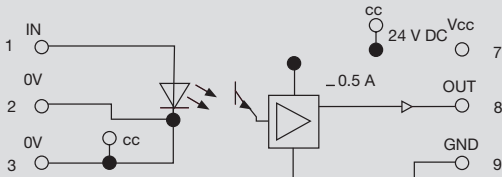
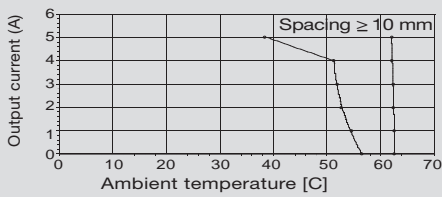
Note

- LED red: hard short-circuit, LED on permanently. The output cuts out and does not switch on again automatically. Reset by briefly interrupting the power supply/input voltage.
- Overload: LED pulsing, approx. 2 s on, approx. 30 s off. Device switches on again after removing the overload.
- Low load: LEDs on permanently, output is switched through.



C

Derating curve



Output	
Output voltage	19.2 V DC ... 24 V DC ... 28.8 V DC
Output current (max.)	5 A
Voltage drop at max. load	
Block-state curr. (closed-circuit curr.)	
Switch-on delay/Switch-off delay	approx. 8 ms/25 ms
Short-circuit-proof/Protective circuit	Yes/max. 96 h/Varistor, polarity reversal protection
General data	
Operating temperature	-25 °C...+50 °C
Storage temperature	-40 °C...+85 °C
Approvals	CSA;cURus;CE;
Insulation coordination (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Rated impulse withstand voltage	6.0 kV
Creepage and clearance path input - output	≥ 5.5 mm
Surge category	III
Pollution severity	2
Dimensions	
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
Note	
Cross-connectors and markers - see WAVESERIES accessories	

Ordering data

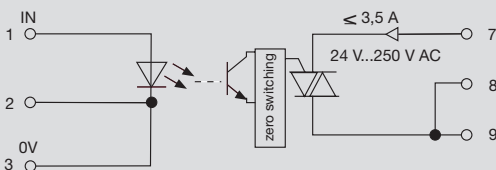
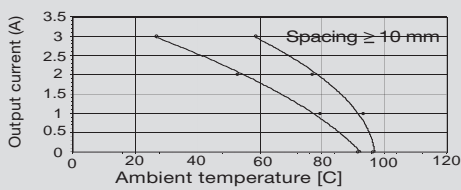
Input	24 V UC / 24 V DC 5 A	115 V UC / 24 V DC 5 A	230 V UC / 24 V DC 5 A	
Rated voltage	24 V UC ±10 %	115 V UC, max. 130 V UC	230 V UC, max. 250 V UC	
Rated current	16.3 mA ac / 13.5 mA dc	3.1 mA ac / 2.8 mA dc	12 mA ac / 1.8 mA dc	
Power rating	0.39 VA / 0.32 W	0.35 VA / 0.32 W	2.7 VA / 0.4W	
Auxiliary voltage	no	no	no	
Status indicator	LED green in output	LED green in output	LED green in output	

Ordering data				
Complete module				
Screw connection	Type			
	Order No.	WOS2 24VUC 8275190000	WOS2 115VUC 8296250000	WOS2 230VUC 8275220000
Tension clamp connection	Type			
	Order No.			
Spare relay, pluggable				
	Type			
	Order No.			
Note				

Output voltage 230 V AC 3.5 A



Derating curve



Output			
Output voltage	24 V AC ... 250 V AC		
Output current (max.)	3.5 A		
Voltage drop at max. load	1.6 V		
Block-state curr. (closed-circuit curr.)	2 mA		
Switch-on delay/Switch-off delay	max. 20 ms/max. 20 ms		
Short-circuit-proof/Protective circuit	no/RC combination with resistor		
General data			
Operating temperature	-25 °C...+50 °C		
Storage temperature	-40 °C...+85 °C		
Approvals	CSA;cURus;CE;		
Insulation coordination (EN 50 178)			
Standards	EN 50178		
Rated voltage	300 V		
Rated impulse withstand voltage	6.0 kV		
Creepage and clearance path input - output	≥ 5.5 mm		
Surge category	III		
Pollution severity	2		
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
Note		Cross-connectors and markers - see WAVESERIES accessories	

Ordering data

Input	15-60 V UC / 24 V DC 3.5 A	115 V UC / 230 V AC 3.5 A	230 V UC / 230 V AC 3.5 A	
Rated voltage	15 V UC...60 V AC/ 66 V DC	115 V UC, max. 130 V UC	230 V UC, max. 250 V UC	
Rated current	3,3...5,6 mA	3.8 mA ac / 7.2 mA dc	11.8 mA ac / 3.3 mA dc	
Power rating	0,31 VA / 0,33 W	0,44 VA / 0,82 W	2,7 VA / 0,75 W	
Auxiliary voltage	no	no	no	
Status indicator	LED green in output	LED green in output	LED green in output	

Ordering data

Complete module				
Screw connection	Type	WOS2 15-60VAC 66VDC	WOS2 115VUC	WOS2 230VUC
	Order No.	8275440000	8259950000	8275400000
Tension clamp connection	Type			
	Order No.			

Ordering data Spare relay, pluggable

Type				
Order No.				

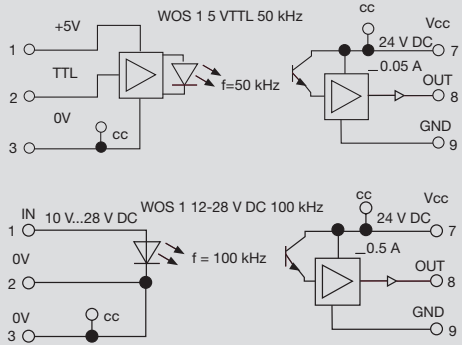
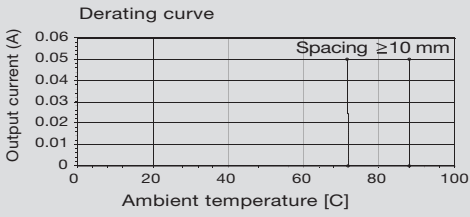
Note				

Optos - WAVESERIES

for high switching frequency up to 100kHz



C



Output	
Output voltage	21.6 V DC ... 24 V DC ... 26.4 V DC
Output current (max.)	50 mA
Voltage drop at max. load	
Block-state curr. (closed-circuit curr.)	
Switch-on delay/Switch-off delay	1 μs/7 μs
Short-circuit-proof/Protective circuit	no/Varistor, polarity reversal protection
General data	
Operating temperature	-25°C...+60°C
Storage temperature	-40 °C...+85 °C
Approvals	CSA;cURus;CE;
Insulation coordination (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Rated impulse withstand voltage	6.0 kV
Creepage and clearance path input - output	≥ 5.5 mm
Surge category	III
Pollution severity	2
Dimensions	
Clamping range (rating- / min. / max.)	mm ² 1.5 / 0.5 / 2.5
Length x width x height	mm 72 / 22.5 / 92.4
Note	
Cross-connectors and markers - see WAVESERIES accessories	

Ordering data

Input	5 V TTL 50 KHZ	12-28 V DC 100 KHZ		
Rated voltage	5 V TTL	12 V DC...28 V DC		
Rated current	13 mA	8 mA		
Power rating	65 mW	190 mW		
Auxiliary voltage	5 V	no		
Status indicator	LED green in output	LED green in output		

Ordering data

Complete module				
Screw connection	Type	WOS1 5VTTL 50KHZ	WOS1 12-28VDC 100KHZ	
	Order No.	8275210000	8275450000	
Tension clamp connection	Type			
	Order No.			

Ordering data

Spare relay, pluggable				
	Type			
	Order No.			

Note				