

DIN Relay 17.5 mm

## KDW 3-24

**Solid state switching over interface module with two output channels and galvanically separated control input with wide voltage range**  
**DIN Rail mounting according to DIN 43 880**

### Type: KDW 3-24/UC24-240V R

24 V solid state switching over relay  
Two high side switches for 24 V/3 A  
all overload and short circuit protected  
suitable for all kind of loads, such as lamps, DC-motors, valves, etc.  
Control input for UC 24 ... 240 V (AC/DC)  
LED status indicator

**Maximum load** **3 A / 32 V**

### Output data for each channel

Type: Power MOS FET	High side switch
Max. switching current	3 A
Max. continuous current	3 A (5 A) <sup>1)</sup>
Max. inrush current, 1 sec <sup>2)</sup>	20 A
Switching voltage range	9 ... 32 V
Max. Load	100 W
Thermal overload protection <sup>2)</sup>	self restoring
Over current limiting <sup>2)</sup>	20 ... 30 A
Clamp voltage	41 ... 52 V
Max. inductive switch-off energy <sup>2)</sup>	0.27 ... 340 Ws (see fig. 1)
ON resistance @ 25 °C	≤ 30 mΩ
Leakage current	≤ 50 μA

<sup>1)</sup> Repetitive operation: When the ratio  $t_{\text{pulse}} / t_{\text{cycle}}$  is a low value then the current can be increased up to 5 A @  $T_A \leq 50$  °C. See fig. 2.

<sup>2)</sup> Not for continuous repetitive operation

### Control input $V_N =$ **UC 24-240 V (AC / DC)**

Operating voltage range	18 ... 255 V
Release voltage / current	≤ 8 V / ≤ 1 mA
Input current	2 mA – 8 mA
Max. power consumption	800 mW
Surge immunity EN 61000-4-5	2 kV

### Insulation

Between input and outputs **2 kVrms 1 minute**

### General Specifications

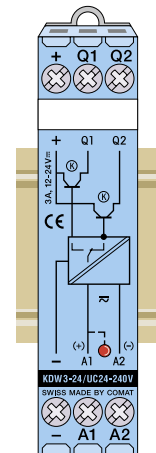
Ambient temperature storage/operation	-40 ... +85 °C/-25 ... +60 °C
ON delay	≤ 3 ms
Release time	≤ 4 ms
Max. Switching frequency	3600 ops/minute
Conductor cross section	Stranded wire 2.5 mm <sup>2</sup> , 2 x 1.5 mm <sup>2</sup>
Max. Screw torque	0.4 Nm
Ingress protection degree	Housing: IP 40, terminals: IP 20
Housing material	Lexan
Weight	30 g

### Standard types

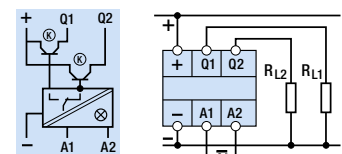
**UC 50/60Hz (AC/DC)** **KDW3-24 / UC24-240V R**

### Accessories

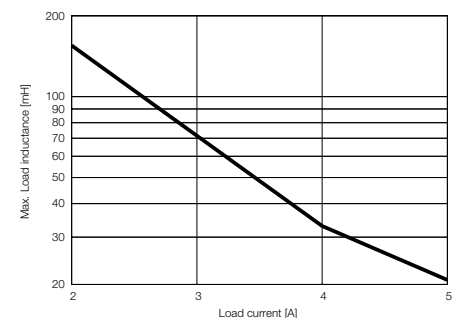
Label plate: **BZS-DIN17.5**



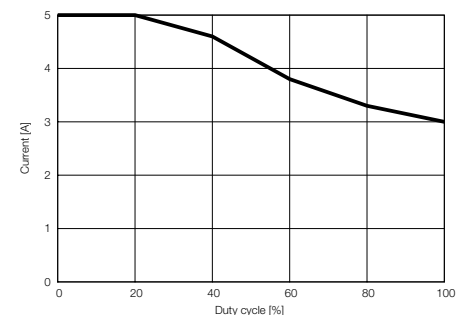
### Connection diagram



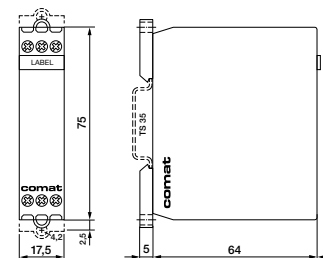
**Fig.1 Load inductance vs. Loadcurrent**



**Fig. 2 Output current vs. duty cycle**



### Dimensions [mm]



### Technical approvals, conformities

