

Accessories

Load monitoring electronics Incl. application software Model ESC24

WIKA data sheet AC 50.07

Applications

- Harbour cranes (RTG, STS, RMG)
- Ship and offshore cranes
- Overhead cranes, bridge cranes, gantry cranes and hoists
- Conveyor system
- Machine building and plant construction, manufacturing automation

Special features

- 24 input/output channels (of which 8 are analogue inputs, 2 CAN bus interfaces)
- Complex functionality, easy to configure via PC
- Including application and AMP plug connection
- High EMC and shock/vibration resistance
- Robust metal case, ingress protection IP67



Load monitoring electronics, model ESC24

Description

The model ESC24 load monitoring electronics is a multi-functional, configurable safety switching device including software. The electronics feature a wide range of digital and analogue inputs and also solid-state outputs. Two CAN interfaces are also available. In combination with gateways, other fieldbuses can be implemented.

Through its wide range of inputs and outputs, the ESC24 can be used flexibly. It is especially suited for complex applications where monitoring or processing several signals is needed.

The parametrisation of the switching thresholds and the outputs is made via the PC software included in delivery. With the help of the parametrisation software, the model ESC24 load monitoring electronics can be adjusted to the respective customer application.





Specifications

Model ESC24	4 20 mA version	DC 0 10 V version
Analog input		
Input resistance	approx. 400 Ω	> 30 kΩ
Accuracy	±1 % of FS	
Input frequency	50 Hz	
Digital input		
Switch-on level	0.7 x UB	
Switch-off level	0.4 x UB	
Input resistance	approx. 3 kΩ	
Input frequency:	50 Hz	
Rated temperature range	-40 +75 °C (depending on load)	
Storage temperature range	-40 +85 °C	
Status display	Operating states via a tri-colour LED (RGB)	
Solid-state output		
Switching voltage	UB	
Switching current	≤ 4 A	
Output frequency	≤ 100 Hz (depending on load)	
Supply voltage (UB)	DC 10 32 V	
Overvoltage	DC 36 V for $t \le 10 s$	
Power consumption	\leq 160 mA (without external load at DC 24 V)	
Case material	closed, shielded metal case fastened with a flange	
Ingress protection	IP67	
Electromagnetic compatibility		
Interference emission	EN 61000-6-4: 2007	
Immunity against electromagnetic fields	EN 61000-6-2: 2005	
Immunity against line-conducted interferences	ISO 7637-2: 2004 Pulses 1, 2b, severity grade 4, functional state C Pulses 2a, 3a, 3b, 4, severity grade 4, functional state A Pulses 5a, severity grade 3, functional state A	
Weight	approx. 1.2 kg	





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WIKA data sheet AC 50.07 · 11/2019

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