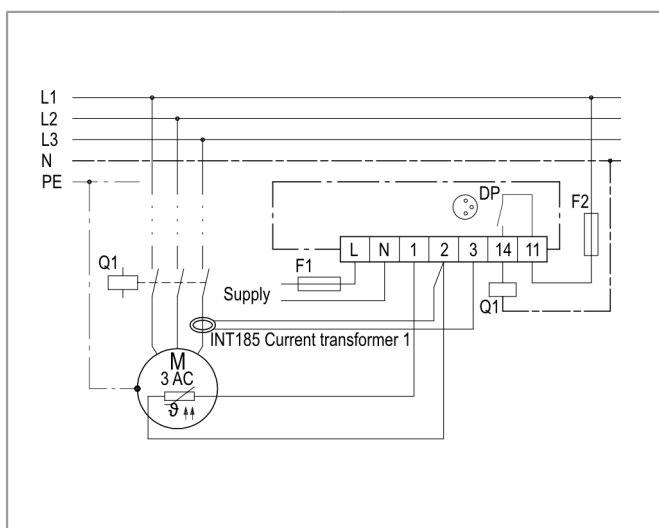


INT69® I2 Diagnose

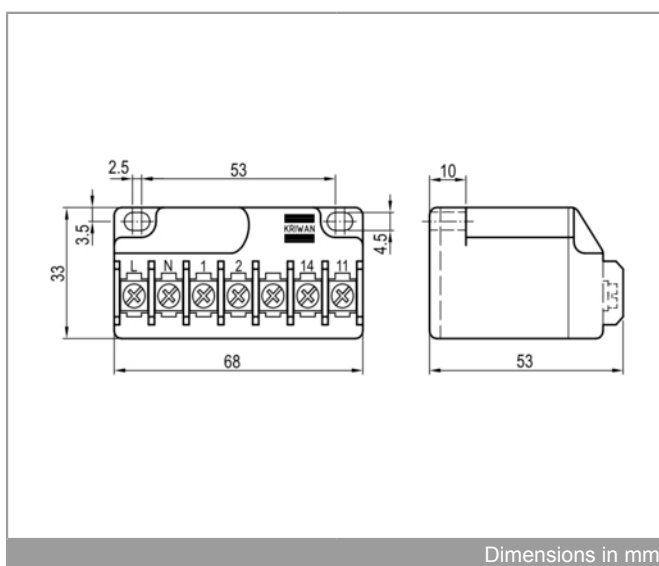


INT69 I2 Diagnose

Illustration similar. Scope of delivery may deviate.



Wiring diagram



Dimensions in mm

Application

The INT69 I2 Diagnose motor protector is a further development of the established KRIWAN motor protectors.

Besides the INT69 I2 Diagnose, the INT185 current converter is required as second component of the KRIWAN monitoring system. The availability and the lifespan of a machine are increased by the quickly reacting current monitoring.

The INT69 I2 Diagnose saves operating and error data in a non-volatile memory. This data can be read and evaluated for diagnosis. This motor protector is mainly used for systems where current monitoring is necessary.

Functional description

There are two evaluation methods for temperature monitoring in the motor winding:

- **Static:** Switch-off happens without delay when the nominal response temperature of the installed AMS or PTC sensors is reached.
- **Dynamic:** If the temperature rises unusually quickly, the motor is switched off immediately, even it is still far below the nominal response temperature. This prevents high temperature overruns.

The following events cause activation in the case of current monitoring:

- Permanent exceeding of the switch-off value for the activation delay time.
- 1.5x of the switch-off value has been exceeded after expiry of the start-up time.

A short circuit or an open circuit at a PTC or current input also causes a switch-off.

Only the output relay is galvanically isolated.

For operation in accordance with regulations, the INT69 I2 Diagnose must be continuously supplied with the specified supply voltage.

Settable parameters (see parameter table) can be set via the diagnostics port with the help of the INTspecter app, and with separately available accessories.

Safety instructions



Installation, maintenance, and operation are to be carried out by an electrician.

The applicable European and national standards for connecting electrical equipment must be observed.

Connected sensors and connection lines that extend from the terminal box must feature at least a basic insulation.

Order data

INT69 I2 Diagnose	31 A 571 P080
Further product information	See www.kriwan.com

Technical specifications

Supply voltage	AC 50/60 Hz 24 V ± 10 % 3 VA
Permissible ambient temperature T_A	-30...+70 °C
Temperature measuring circuit	
– Type	1-2 AMS sensors in series alternative 1-9 PTC sensors according to DIN 44081, DIN 44082 in series
– R_{25} , total	<1.8 k Ω
– $R_{\text{activate, static}}$	4.5 k Ω ± 20 %
– R_{reset}	2.75 k Ω ± 20 %
– Max. length of connection line	10 m
Current monitoring	
– Switch-off value	
– Accuracy	± 5 %
– Activation delay / start-up time	
– Max. length of connection line	0.5 m
Input run detection motor	
– Motor on	\geq AC 50/60 Hz 1 A ± 5 %
– Motor off	\leq AC 50/60 Hz 0.5 A ± 5 %
Operation with frequency converter	Not suitable
Reset of the reset delay	Power reset >5 s only possible when error no longer present
Relay	
– Contact	AC 240 V 2.5 A C300 Mind. AC/DC 24 V 20 mA
– Mechanical service life	Approx. 1 million switching operations
Interface	Diagnostics port (DP)
Protection class according to EN 60529	IP00
Connection type	Screw terminals
Housing material	PA glass-fiber reinforced
Mounting	Screw mounting
Dimensions	See dimensions in mm
Weight	Approx. 100 g
Testing basis	IEC/EN 60335, IEC/EN 60730, UL 60730 EN 61000-6-2, EN 61000-6-3 EN 61010-1 Overvoltage category II Pollution level 2
Approval	UL file no. E473026 cUR _{US} Protective control VDE certificate no. 40022017

Parameter table

Parameter name	Adjustment range		Default	Unit	Individual settings
	Min	Max			
Temperature measuring circuit					
– Operating mode dynamic	Deactivated	Stage 2	Stage 2		
Short circuit monitoring PTC					
– Switch-off	0	300	20	Ω	
– Reset (difference to switch-off)	10	100	10	Ω	
Current monitoring					
– Operating mode	Deactivated	3-phase	1-phase		
– Switch-off value 1, 1-phase	4.0	100.0	4.0	A	
– Switch-off value 1, 3-phase	4.0	72.0	4.0	A	
– Switch-off value 2 (in % to switch-off value 1)	110	200	150	%	
Activation delay					
– PTC short circuit monitoring	1.0	60.0	2.0	s	
– Current monitoring switch-off value 1	0.5	6.0	4.0	s	
Reset delay					
– Motor temperature static	00:00:0	Locked	00:05:00	hh:mm:ss	
– Motor temperature dynamic	00:00:01	Locked	00:05:00	hh:mm:ss	
– PTC short circuit monitoring	00:00:01	Locked	00:05:00	hh:mm:ss	
– Current monitoring 1 switch-off value 1	00:00:01	Locked	00:05:00	hh:mm:ss	
– Current monitoring 1 switch-off value 2	00:00:01	Locked	00:05:00	hh:mm:ss	
Operating areas limits					
– Operating area limit from increased to critical as percentage from trip point 1	0	100	85	%	
– Operating area limit from normal to increased as percentage from "increased to critical"	0	100	80	%	

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