

Instruction Manual

Electronic Motor Protection Relay (GMP60TD/TDa)

Thank you for purchasing products of LS Inc. GMP60TD Series

SAFETY PRECAUTIONS

Be sure to read the instruction manual and safety precautions before using products.

This manual must be given to the person who actually treats the products and managers are responsible for their maintenance.

⚠ WARNING : Offending against message will result in death and serious injury.

⚠ CAUTION : Offending against message will result in minor injury or physical damage.

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⚠ WARNING

- Turn off the upstream breaker before installation or repairs.
If do not, It will result In a electrocution and serious injury.
- Do not touch any live naked terminals.
If do not, It makes an electric shock.

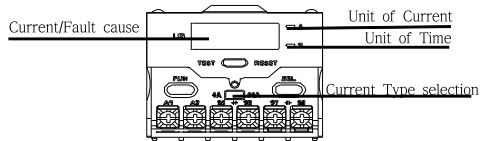
⚠ CAUTION

- Check the product with What order us.
The Product which is different from order may cause a malfunction or a fire.
- Check the parts lost or crack by transportation.
It may cause a accident and wrong operation.
- Installation, maintenance and inspection of the product should be performed by qualified engineers having special knowledge.
It may cause a malfunction and wrong operations.
- Please check the relays by pressing the TEST/RESET Key before running the Motor.
- Do not change a current type switch during running a motor.
It may cause a malfunction and wrong operations.
- Refer to wiring diagram for proper terminal connection.
It may cause a malfunction.
- Set the rated current and time according to motor characteristic.
It may cause motor damage.

⚠ CAUTION

- Install a noise filter out of products, in this case that the total harmonic distortion is more than 40%.
It may cause a malfunction and wrong operation.
- Turn off the power before changing a current type switch, and then be sure to adjust the current type in the menu.
If do not, it may be displayed incorrectly on the display window.
- Keep dry (30~90%RH) and without dust.
- Keep the ambient temperature properly.(-30?~80?)
- Be careful not to be damaged by accidents during transportation or installation.
It may cause a malfunction and wrong operations.
- It is possible to set the functions during TEST mode.
- When the device become useless, it should be dispose of them as an industrial waste.

INDICATION AND CONTROLLER PART



FUNCTION & SETTING METHOD

FUN	SEL	FUNCTION	INITIAL VALUE	비고
1. Cty	6A/60A	Setting of Current Type	6A	Along Current type S/W
2. O-t	0.5/1~30sec	Setting of Operation Time	30	
3. d-t	1~60sec	Setting of Delay Time	60	
4. r-C	0.5~6.0/5~60	Setting of Rated Current	6/60	
5. Ctr	0.25/0.5/1~120	Setting of Current Ratio	1	
6. P-F	OFF/On	Setting of Phase Fault	OFF	
7. U-C	OFF/30~70%	Setting of Undercurrent	OFF	GMP60TDa
8. A-r	OFF/1~20min	Setting of Auto Reset time	OFF	GMP60TDa
9. Srt	OFF/10~8760hour	Setting of Running time	OFF	GMP60TDa
A.trt	-	Total running time	-	GMP60TDa
b.r-t	-	Running time	-	GMP60TDa
Stor		Store		

- ▶ The auto reset function operates when a overload trip occurs .
- ▶ Number A and b are just functions, which check time passed.
- ▶ It is not sure that current is less than 0.5A / 5A(the minimum rated current).
- ▶ After changing the current type switch, be sure to set Function 1 and then store.
- ▶ During running a motor, Do not change the slide current type switch and Function 1.
- ▶ It is possible to set the functions during TEST mode.

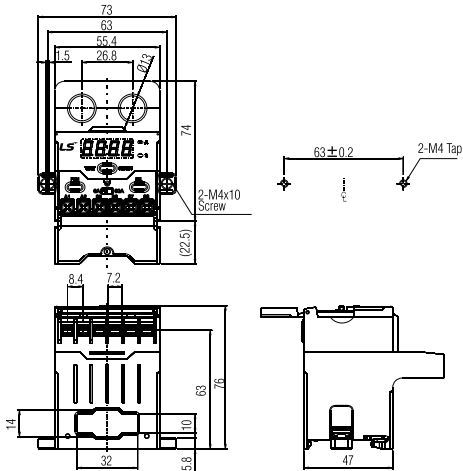
Please refer to the catalog for further details.

FAULT INFORMATION

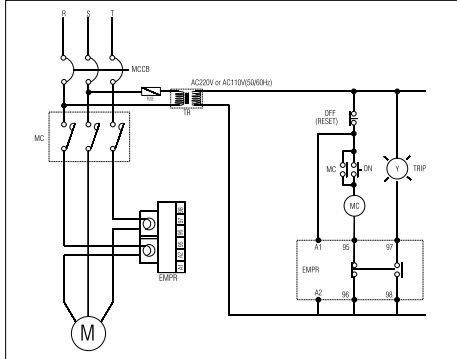
Protection	FND	Description	Remark
Over current	O-L	More than set current : Within the set time	
Undercurrent	U-C	Lower than the undercurrent set ratio : Within 3S	GMP60TDa
Phase Loss	PF-r	Over 70% of the rate of unbalance : Within 3S	R Phase Loss
	PF-t	Over 70% of the rate of unbalance : Within 3S	T Phase Loss
LOCK	Loc	More than the lock set current ratio : within 1S	
Approaching Running Time	OrH	When Running time approaches at setting time	GMP60TDa

- ▶ When the FUN key and SEL key are pushed simultaneously, a last trip cause appears on the display window.

INSTALLATION DIMENSION



WIRING DIAGRAM



Relay contacts (number 95 and 96) are normal close contact, when power is on. And power is off, those are changed to normal open contact.

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