ASHIDA FLAG RELAY : AFLGR/C

Introduction:

ASHIDA has designed economical & reliable Flag Relays. The simple and compact construction of AFLGR/C is suitable for interlocking, signaling etc in Protection, Control and Industrial Systems. ASHIDA relays are known for reliability, performance and security. ASHIDA relays are design for all condition and application.

Features:

- Suitable for interlocking, signaling etc. in Protection, Control and Industrial Systems.
- High voltage insulation.
- Low power consumption.
- Medium or light duty operation and long mechanical life.
- Indication flags.
- High resistance to shock and vibration.
- Contacts conform to IEC-60255. Duty: 1250 VA
- Attracted armature type compact design with positive action.
- Din Standard size compact cabinet.
- Simple in construction.

Application:

- Low burden sensitive relay.
- Alarm Control Indications and other auxiliary duties in AC and DC system.

Available Contact Combinations:

- 4 NO HR
- 3 NO + 1 NC HR
- 2 NO + 2 NC HR
- 2 NO + 2 NC SR
- 2 NO SR + 2 NC HR
- 2 C/O HR or SR

Operation:

The relay element specially designed to give SR & HR contacts combination. The coil of relay element is directly brough to terminal 9 and 10. Relay is available with flags and AC/DC coil.

After applying the energizing voltage at coil terminal, the relay operates and NO contacts closes and NC contact opens. Also the mechanical flag become RED.

HR conatcts and flags can be reset by using reset plunger. SR contacts will get reset with coil i.e. once the supply voltage get removed the contacts get reset.

Standard Flag:

AFLGR/C Relay is available with standard Hand-Reset Flag which drops upon operation of the relay. The flag stays in the operated state, indicating that a fault has occurred.

Installation:

AFLGR/C relays are robust in construction; require careful treatment to installation on site. By following simple procedure the possibility of premature failure can be eliminated. The place of installation should be clean, dry and reasonably free from dust and excessive vibration. The site should preferably be well illuminated to facilitate inspection.

AFLGR/C supports panel mounting and can be mounted into panels using M4 X 12 screws.

Procedure for mounting the device into panel:

Loose the M4 X 12 screws from the relay, then insert the Relay into the panel cut-out as show below.

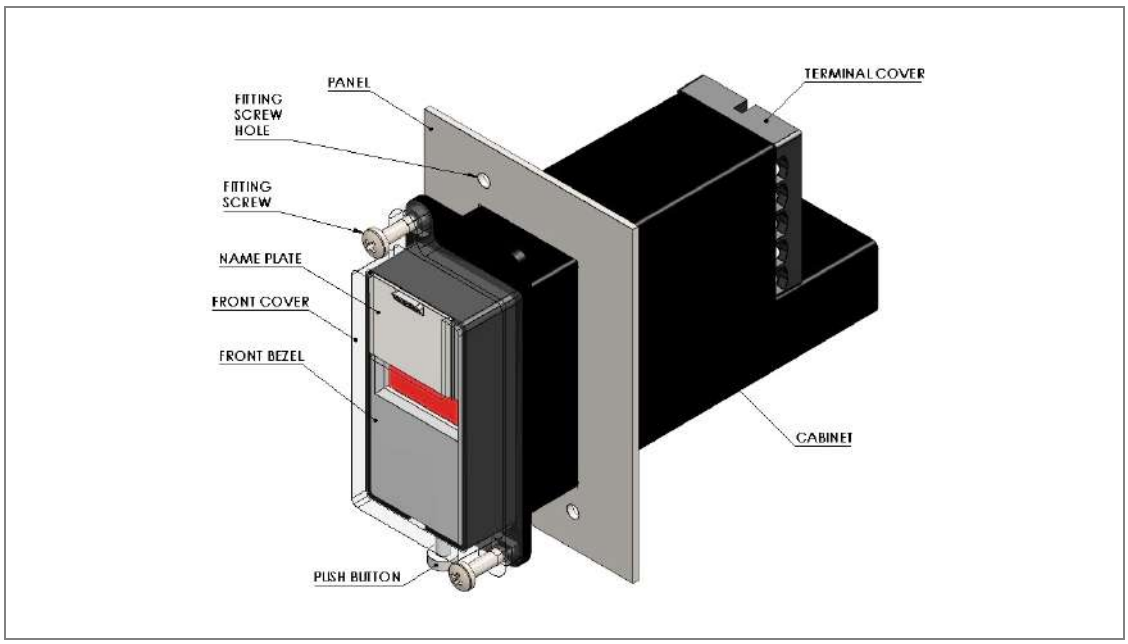


Figure 1: Inserting relay in to the panel cut-out

After inserting the Relay in the Panel, use M4 X 12 Screws to fasten the relay to the Panel.

Caution: All screws should be fastened properly. Always use M4 X12 screws

The Relay after fastening to the Panel with M4 X 12 Screws is shown below.

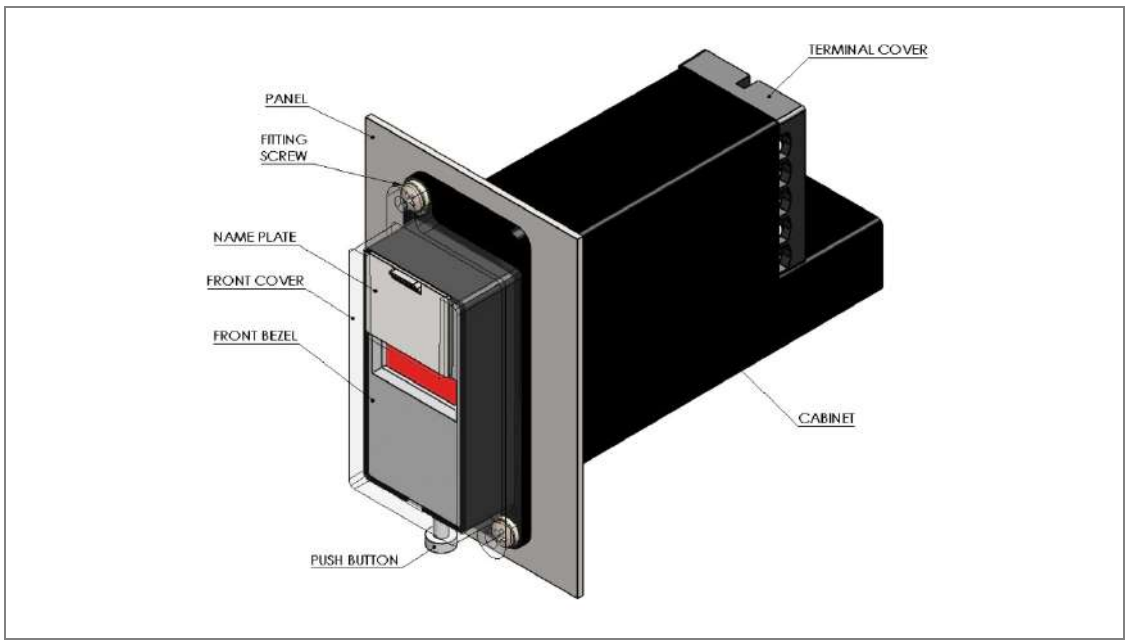


Figure 2: Relay mounted on the panel-front view

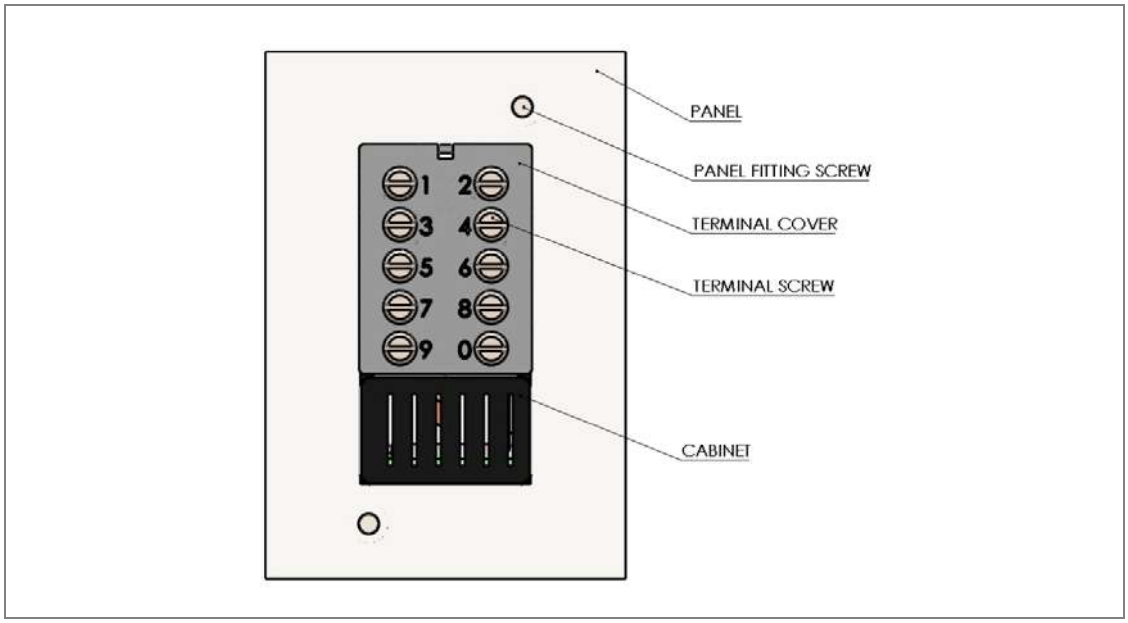


Figure 3: Relay back terminal view

Procedure for mounting Terminal cover on relay back terminal:

The AFLGRC relay provided with Terminal cover on back terminal. This cover protects from hazardous voltage on relay back terminal in accidental touch.

After the relay mounting in panel, finish the back terminal connection as per schema. After connection on back terminal, Keep the Terminal cover on relay back terminal as shown in below figure.

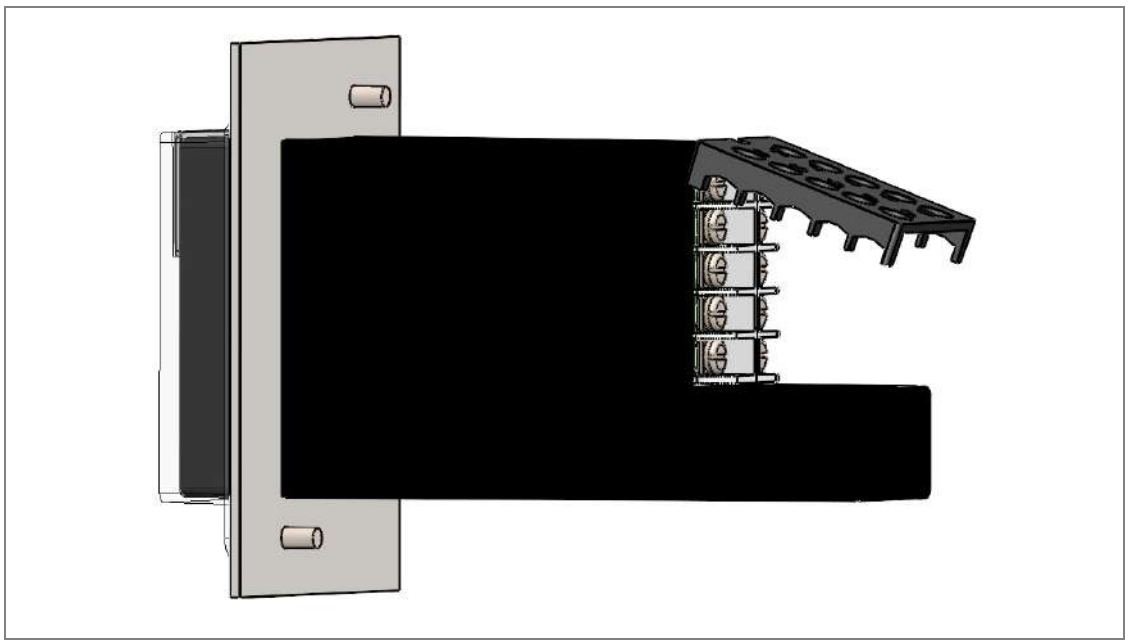


Figure 4: mounting terminal cover on back terminal.

Press the Terminal in downward direction to fix on the back terminals.

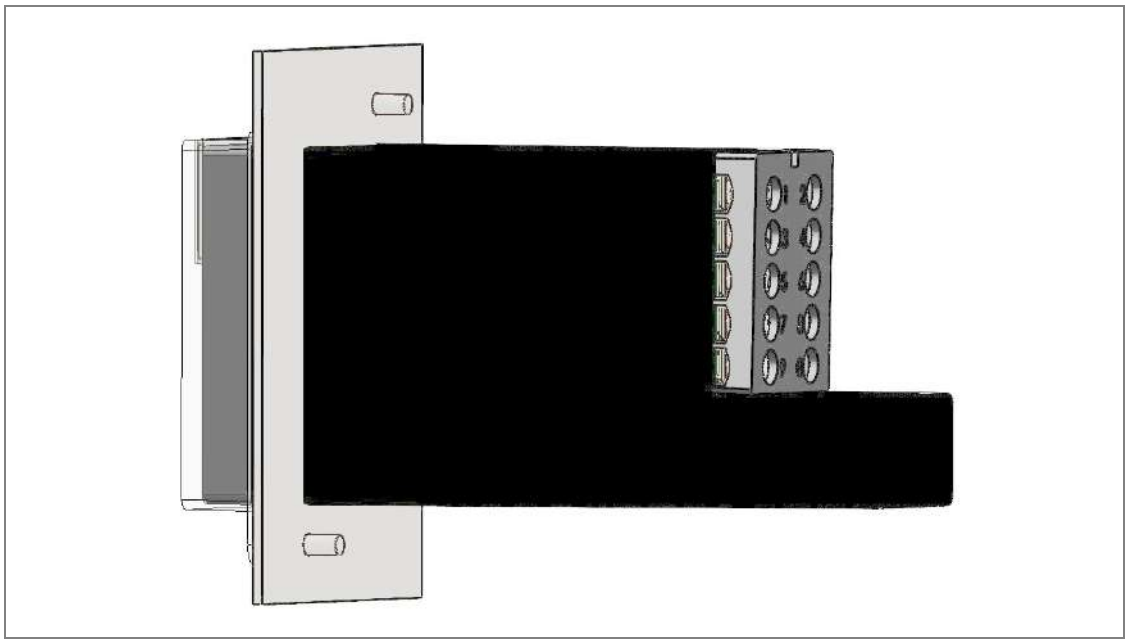


Figure 5: Terminal cover mounted on the back terminal – rear view.

Technical Specification:

Auxiliary Supply Input:		
Sr. No.	**Specification**	**Particulars**
1.	Nominal Operating Supply	24 V/ 30 V/ 48 V/ 110 V/ 220 V AC / DC and 100 – 125 / 200 – 230 V AC / DC (Specify while ordering)
2.	Nominal Operating Range.	80% to 120% of rated operating voltage. 24 V (19.2 – 28.8 V) 30 V (24 – 36 V) 48 V (38.4 – 57.6 V) 110 V (88 – 132 V) 220 V (176 – 264 V)
3.	Supply Burden	6VA @ rated voltage
4.	Operational Indicator	Mechanical Flag (Red for Alarm, White for Normal) in window: HR. Type.

Output Contacts:			
Sr. No.	**Specification**	**Particulars**	
1.	Output Contacts	Make & carry	: 1250 VA/ W with 5Amp & 660V AC /DC
		Make & carry for 3 sec	: 7500 VA /W 30Amp & 660V AC /DC
		Breaking capacity	: 1250 VA with 5Amp & 660V AC 100 W Resistive 50 W Inductive 5A/660V DC
2.	Operating Time	For De-Energized : 20 - 25 ms @ rated voltage For Energized : Less than 60 ms @ rated voltage	

Operating Conditions:		
Sr. No.	**Specification**	**Particulars**
1.	Relative Humidity	: Humidity (RH) 95% maximum
2.	Operating temperature range	: -25 ºC to +65 ºC
3.	Storage temperature range	: -25 ºC to +70 ºC.

Drawing Reference:

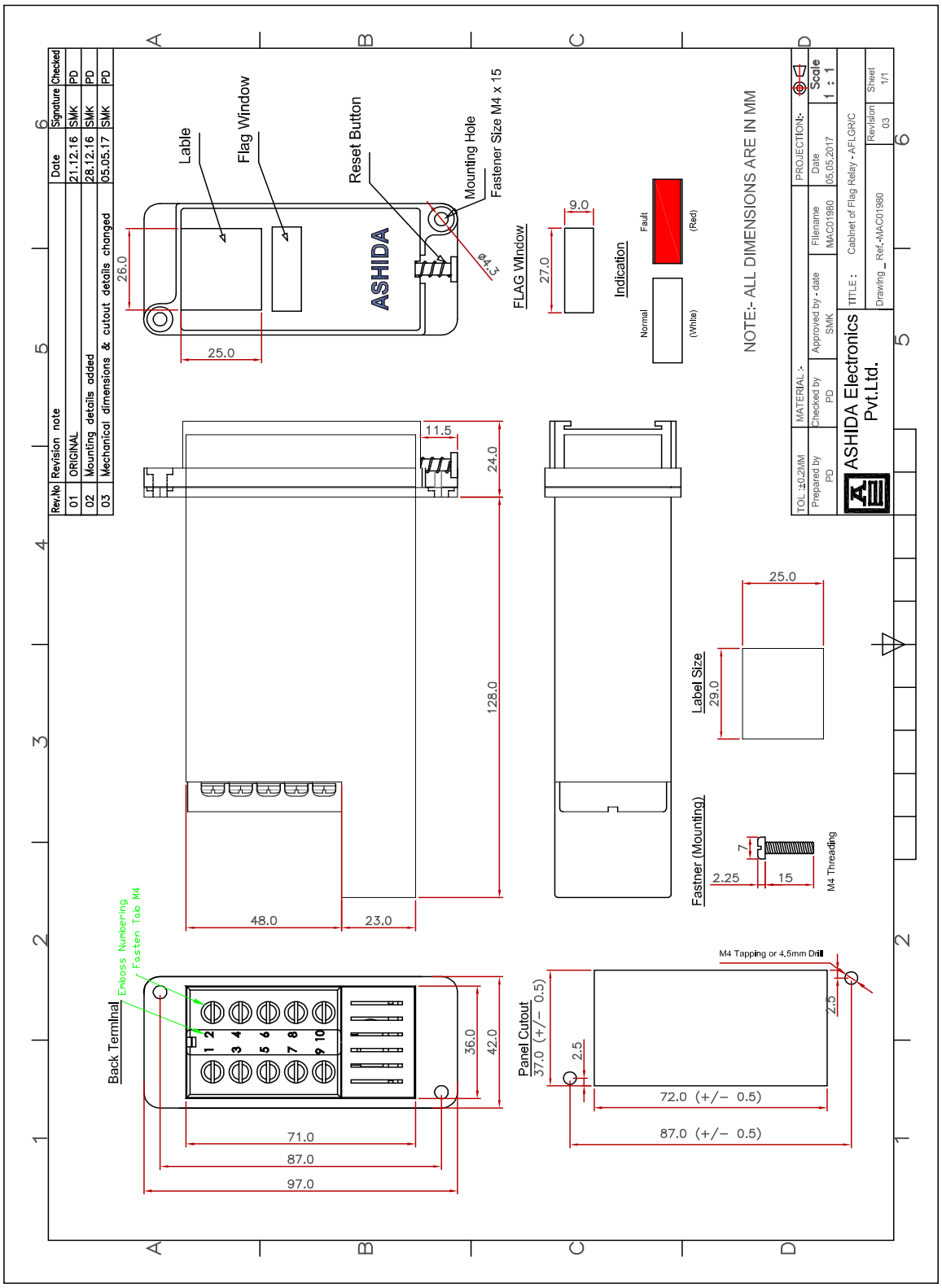
Drawing References:		
1.	For Cabinet Type	: MAC01980
2.	Back Terminal	: AXL04203

Conformance to Standards:

Sr. No.	Test	Standards
1.	Dielectric Test	: IEC–60255–27: 2013
2.	Insulation Test	: IEC–60255–27: 2013
3.	Impulse Test	: IEC–60255–27: 2013
4.	Relay Characteristic & Performance Test	: IEC–60255–1: 2009
5.	Rated Burden Test	: IEC–60255–1: 2009
6.	IP Rating	: IP 52

*NOTE: Detailed Type test report are available on request.

Mechanical Dimensions:

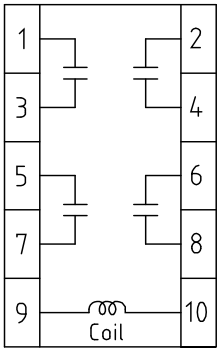


Back Terminal connection diagram:

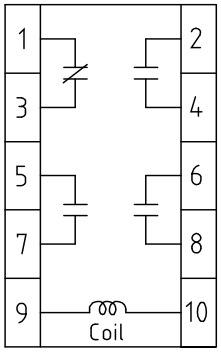
Rev No	Revision note	Date	Signature	Checked
01	Orignal Revision	21.12.2016		
02	Contacts Type changed	28.12.2016		
03	Contacts added	05.05.2017		
04	De-energized coil details added	13.08.2022		

Back Terminal Details(normally de-energized)

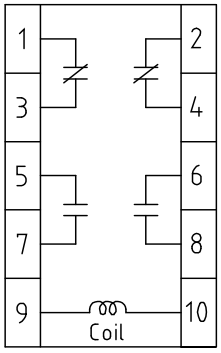
(4 NO HR)



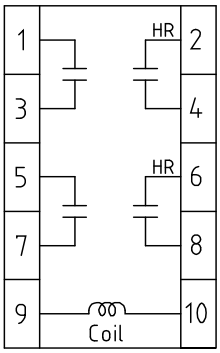
(3 NO + 1 NC HR)



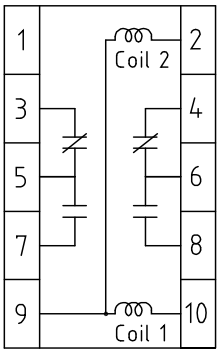
(2 NO + 2 NC HR)



(2 NO SR + 2 NO HR)

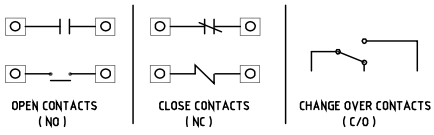


(2 C/O)



LEGEND :

HR Contacts



Dim : MM	TOL :	FINISH:		MATERIAL:	
Perpaed by JD	Checked by SG	Approved by - date SMK	Filename AXL04204	Date 13.08.2022	Scale NTS

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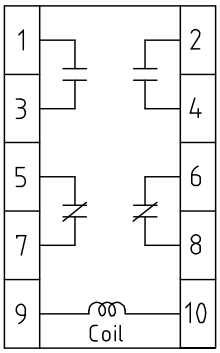
TITLE : Terminal Details of Flag Relay - AFLGR/C

Drawing__ Ref. AXL04204 | Edition 04 | Sheet 1 OF 2

Rev No	Revision note	Date	Signature	Checked
01	Orignal Revision	21.12.2016		
02	Contacts Type changed	28.12.2016		
03	Contacts added	05.05.2017		
04	De-energized coil details added	13.08.2022		

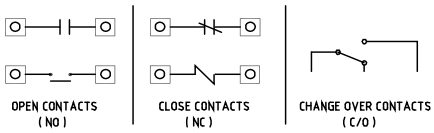
Back Terminal Details(normally energized Reverse flag)

(2 NO + 2 NC HR)



LEGEND :

HR Contacts



Dim : MM	TOL :	FINISH:		MATERIAL:	
Perpaed by JD	Checked by SG	Approved by - date SMK	Filename AXL04204	Date 13.08.2022	Scale NTS

ASHIDA
Agile Solutions Powerful Legacies

TITLE : Terminal Details of Flag Relay - AFLGR/C

Drawing__ Ref. AXL04204 | Edition 04 | Sheet 2 OF 2

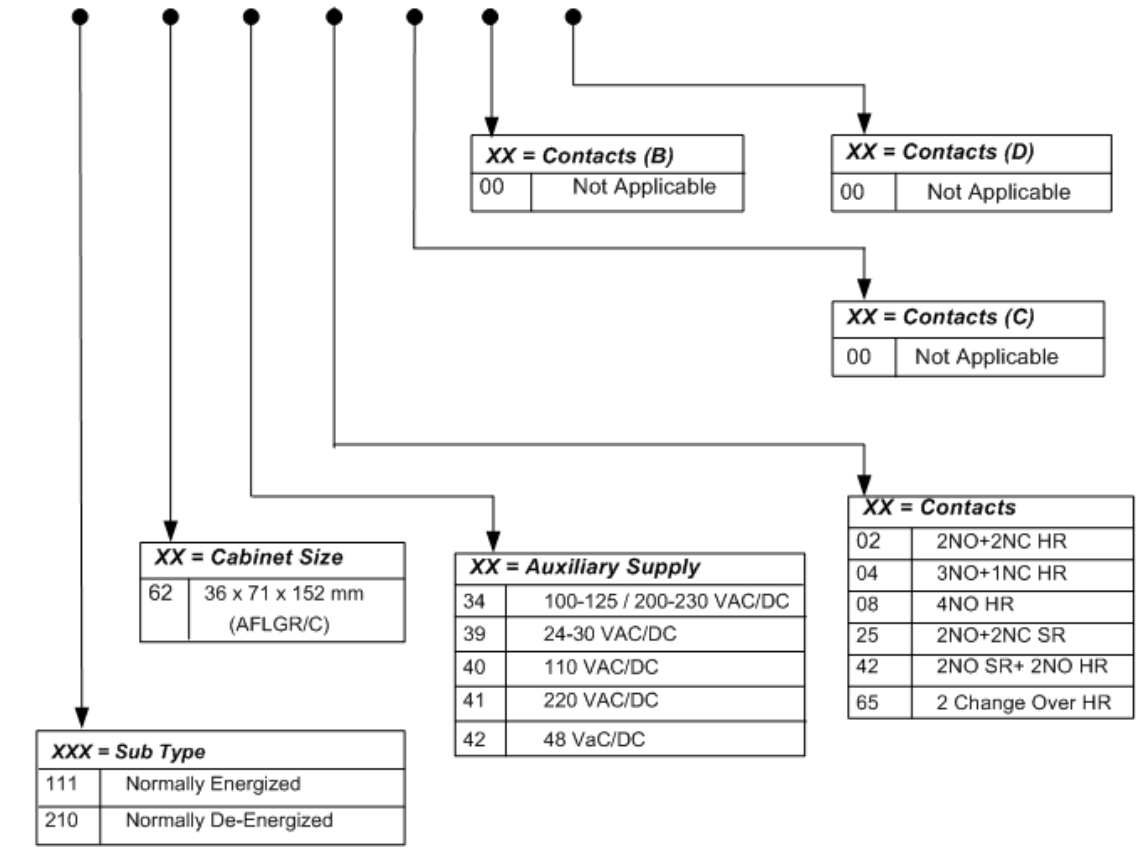
Ordering Information:

The relay is available with nos. of different option. The option is specified by model no. It is user responsibility to specify correct model no. while ordering.

While Ordering Specify the following Information for **AFLGR / C** Relay

Definition of Model No For AFLGR Relays

AM XXX – XX – XX – XX – XX – XX – XX



Available Models:

AFLGR / C	-	AM	-	XXX	-	XX	-	XX	-	XX	-	XX	-	XX	-	XX

- AFLGR/C – AM-111-62-34-65-00-00-00.
- AFLGR/C – AM-111-62-39-02-00-00-00.
- AFLGR/C – AM-111-62-39-04-00-00-00.
- AFLGR/C – AM-111-62-39-08-00-00-00.
- AFLGR/C – AM-111-62-39-25-00-00-00.
- AFLGR/C – AM-111-62-39-42-00-00-00.
- AFLGR/C – AM-210-62-34-65-00-00-00.
- AFLGR/C – AM-210-62-39-02-00-00-00.
- AFLGR/C – AM-210-62-39-04-00-00-00.
- AFLGR/C – AM-210-62-39-08-00-00-00.
- AFLGR/C – AM-210-62-39-25-00-00-00.
- AFLGR/C – AM-210-62-39-42-00-00-00.

- AFLGR/C – AM-111-62-40-02-00-00-00.
- AFLGR/C – AM-111-62-40-04-00-00-00.
- AFLGR/C – AM-111-62-40-08-00-00-00.
- AFLGR/C – AM-111-62-40-25-00-00-00.
- AFLGR/C – AM-111-62-40-42-00-00-00.
- AFLGR/C – AM-111-62-41-02-00-00-00.
- AFLGR/C – AM-111-62-41-04-00-00-00.
- AFLGR/C – AM-111-62-41-08-00-00-00.
- AFLGR/C – AM-111-62-41-25-00-00-00.
- AFLGR/C – AM-111-62-41-42-00-00-00.
- AFLGR/C – AM-111-62-42-02-00-00-00.
- AFLGR/C – AM-111-62-42-04-00-00-00.
- AFLGR/C – AM-111-62-42-08-00-00-00.
- AFLGR/C – AM-111-62-42-25-00-00-00.
- AFLGR/C – AM-111-62-42-42-00-00-00.

- AFLGR/C – AM-210-62-40-02-00-00-00.
- AFLGR/C – AM-210-62-40-04-00-00-00.
- AFLGR/C – AM-210-62-40-08-00-00-00.
- AFLGR/C – AM-210-62-40-25-00-00-00.
- AFLGR/C – AM-210-62-40-42-00-00-00.
- AFLGR/C – AM-210-62-41-02-00-00-00.
- AFLGR/C – AM-210-62-41-04-00-00-00.
- AFLGR/C – AM-210-62-41-08-00-00-00.
- AFLGR/C – AM-210-62-41-25-00-00-00.
- AFLGR/C – AM-210-62-41-42-00-00-00.
- AFLGR/C – AM-210-62-42-02-00-00-00.
- AFLGR/C – AM-210-62-42-04-00-00-00.
- AFLGR/C – AM-210-62-42-08-00-00-00.
- AFLGR/C – AM-210-62-42-25-00-00-00.
- AFLGR/C – AM-210-62-42-42-00-00-00.

NOTE: *2 C/O HR/SR contacts are available with 100-125 / 200-230 VAC/DC auxiliary supply voltage only.*

With other supplies rest contacts combination are available.

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