

Fiche technique du produit

Spécifications



Harmony Time - relais temporisé 8 fonctions - 0,05..1s - 24Vca/cc - 20F

RE7MY13BU

⚠ La production de ce produit a été arrêtée le: 31 mars 2016

⚠ Fin de service le: 1 juin 2016

⚠ Arrêt de commercialisation

Statut commercial: Arrêt de commercialisation

Principales

Gamme De Produit	Zelio Time
Type De Produit Ou Équipement	Relais de temporisation industriel
Description Des Contacts	2 "O/F"
Nom De Composant	RE7
Type De Temporisation	Qt A C H Qg W D Di
Plage De Temporisation	0,05 s...300 H

Complémentaires

Type De Sortie Logique	Relais
Matière Des Contacts	Contacts nickel argent 90/10
Dimension Du Pas En Largeur	22,5 mm
[Us] Tension D'Alimentation	110 à 240 V CA 50/60 Hz 24 V CA/CC 50/60 Hz 42...48 V CA/CC 50/60 Hz
Plage D'Utilisation En Tension	0,85 à 1,1 Us
Mode De Raccordement	Bornes à vis, 2 x 1,5 mm² souple avec embout Bornes à vis, 2 x 2,5 mm² souple sans embout
Couple De Serrage	0,6...1,1 N.m
Réglage Exact Du Temps De Retard	+/- 10 % pleine échelle
Précision De Répétition	+/- 0,2 %
Dérive En Température	< 0,07 %/°C
Dérive En Tension	< 0,2 %/V
Durée Minimale De L'Impulsion	20 ms
Temps De Réinitialisation	50 ms
Tension De Coupure Maximale	250 V CA/CC
Endurance Mécanique	20000000 cycle
[Ith] Courant Thermique Conventionnel	8 A

Clause de non responsabilité : Cette documentation n'est pas destinée à remplacer ni ne peut servir à déterminer l'adéquation ou la fiabilité de ces produits dans le cadre d'une application spécifique

[Ie] Courant Assigné D'Emploi Maximal	2 A DC-13 24 V à 70 °C se conformer à CEI 60947-5-1/1991/VDE 0660 0,1 A DC-13 250 V à 70 °C se conformer à CEI 60947-5-1/1991/VDE 0660 0,2 A DC-13 115 V à 70 °C se conformer à CEI 60947-5-1/1991/VDE 0660 3 A AC-15 à 70 °C se conformer à CEI 60947-5-1/1991/VDE 0660
Capacité De Commutation Minimum	10 mA à 12 V
Tension D'Entrée	< 60 V Y1Z2 terminal(s)
Courant Commuté Maximum	1 mA (Y1Z2)
Compatibilité De L'Entrée Numérique	Détecteurs à 3/4 fils PNP/NPN sans charge interne <50 m Y1Z2 terminal(s)
Caractéristiques Du Potentiomètre	Linéaire 47 kOhm (+/- 20 %), 0,2 W, longueur de câble <25 m Z1Z2 raccordement(s)
Marquage	CE
Catégorie De Surtension	III se conformer à CEI 60664-1
[Ui] Tension Assignée D'Isolément	250 V entre circuit de contact et entrées de commande CEI certifié 250 V entre circuit de contact et alimentation CEI certifié 300 V entre circuit de contact et entrées de commande CSA certifié 300 V entre circuit de contact et alimentation CSA certifié
Valeur De Désengagement	> 0,1 Uc
Position De Montage	Toutes positions sans déclassement
Tenue Aux Ondes De Choc	2 kV se conformer à CEI 61000-4-5 niveau 3
Puissance Consommée En Va	2 VA à 48 V 1,2 VA à 24 V 12,5 VA à 240 V 2,8 VA à 110 V
Puissance Consommée Maximale En W	0,8 W à 24 V 1,6 W à 48 V
Description Des Bornes	ALT (Z2)UNUSED (B1-A2)CO (15-16-18)OC (25-26-28)OC (Y1)UNUSED (Z1)UNUSED
Hauteur	78 mm
Largeur	22,5 mm
Profondeur	80 mm
Poids Du Produit	0,15 kg

Environnement

Immunité Aux Micro-Coupures	3 ms
Normes	EN/CEI 61812-1
Certifications Du Produit	UL CSA GL
Température Ambiante De Stockage	-40...85 °C
Température Ambiante De Fonctionnement	-20...60 °C
Humidité Relative	15...85 % 3K3 se conformer à CEI 60721-3-3
Tenue Aux Vibrations	0,35 mm (f= 10...55 Hz) se conformer à CEI 60068-2-6
Tenue Aux Chocs Mécaniques	15 gn pour 11 ms se conformer à CEI 60068-2-27
Degré De Protection Ip	IP20 (bornes) IP50 (enveloppe)

Degré De Pollution	3 se conformer à CEI 60664-1
Tenue Diélectrique	2,5 kV
Onde De Choc Non-Dissipative	4,8 kV
Tenue Aux Décharges Électrostatiques	6 kV en contact se conformer à CEI 61000-4-2 niveau 3 8 kV dans l'air se conformer à CEI 61000-4-2 niveau 3
Tenue Aux Champs Électromagnétiques Rayonnés	10 V/m se conformer à CEI 61000-4-3 niveau 3
Tenue Aux Transitoires Rapides	2 kV se conformer à CEI 61000-4-4 niveau 3
Perturbation Radiée/Conduite	Groupe 1 CISPR11 - Classe A CISPR22 - classe A

Emballage

Type D'Emballage 1	PCE
Nb Produits Dans L'Emballage 1	1

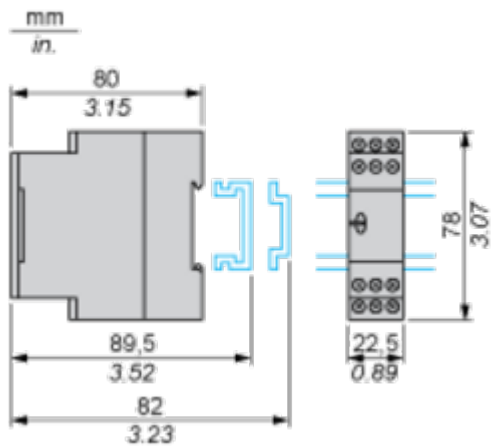
Garantie contractuelle

Garantie	18 months
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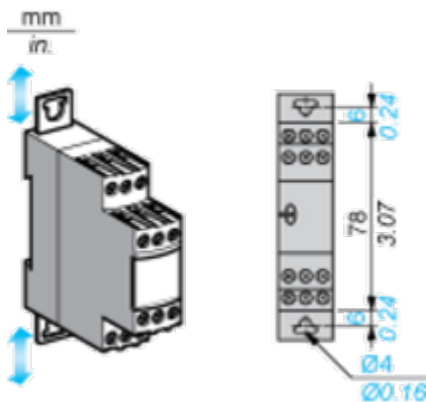
Dimensions Drawings

Width 22.5 mm

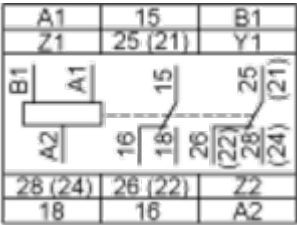
Rail Mounting



Screw Fixing

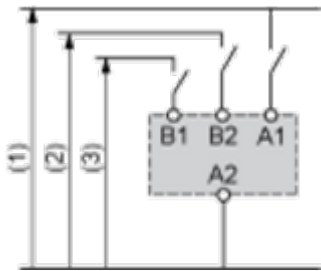


Internal Wiring Diagram



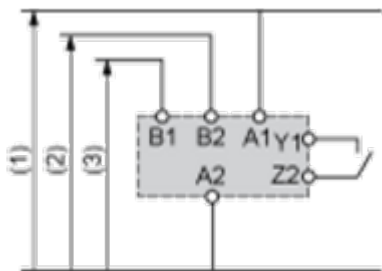
Recommended Application Wiring Diagram

Start on Energisation



- 1 Supply
- 2 12...48 V
- 3 24 V

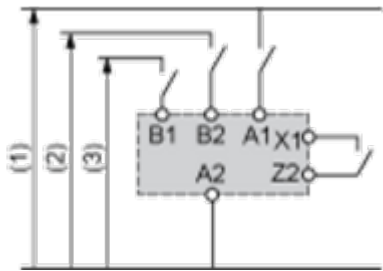
Start by External Control



- 1 Supply
2 12...48 V
3 24 V

Recommended Application Wiring Diagram

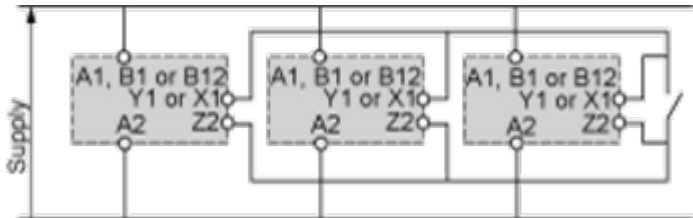
External Control of Partial Stop



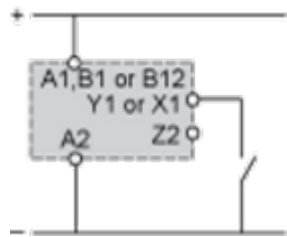
- 1 Supply
- 2 12...48 V
- 3 24 V

Control of Several Relays

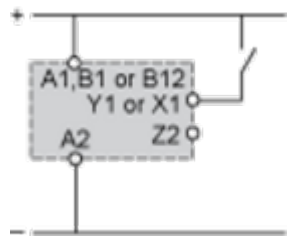
Control of several relays with a single external control contact



Connection of an External Control Contact Without Using Terminal Z2

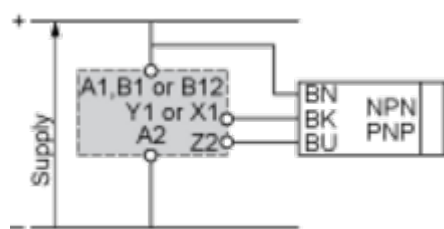


Direct current supply only.
It is advisable to follow the recommended wiring schemes detailed above if the restrictions given are taken into account.



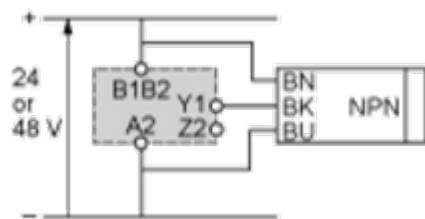
Direct current supply only.
It is advisable to follow the recommended wiring schemes detailed above if the restrictions given are taken into account.

Connection 3-Wire NPN or PNP Sensor



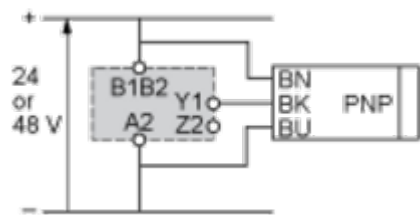
Connection 3-Wire NPN or PNP Sensor Without Using Terminal Z2

Connection NPN



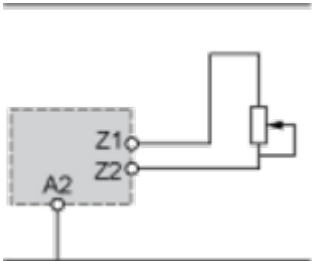
It is advisable to follow the recommended wiring schemes detailed above if the restrictions given are taken into account.

Connection PNP



It is advisable to follow the recommended wiring schemes detailed above if the restrictions given are taken into account.

Connection of Potentiometer



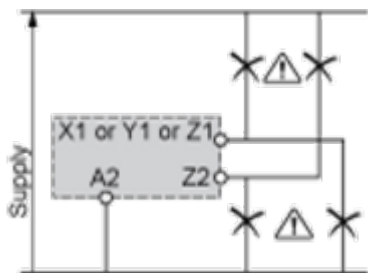
Connection Precautions

 WARNING

UNEXPECTED EQUIPMENT OPERATION

No galvanic isolation between supply terminals and control inputs.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

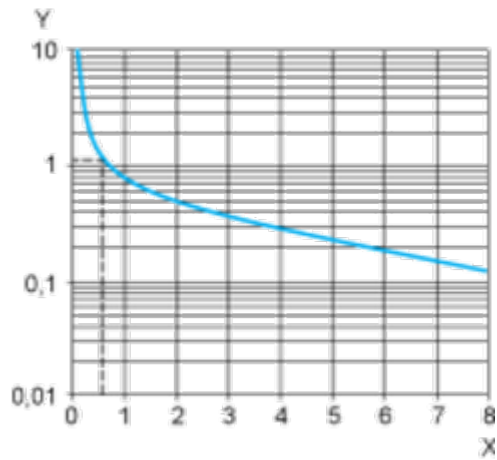


Performance Curves

Performance Curves

A.C. Load Curve 1

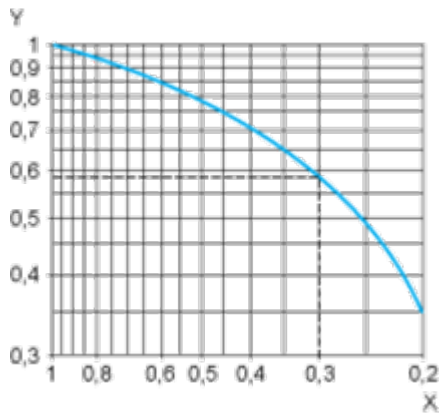
Electrical durability of contacts on resistive loading millions of operating cycles



X Current broken in A
Y Millions of operating cycles

A.C. Load Curve 2

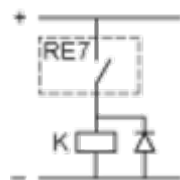
Reduction factor k for inductive loads (applies to values taken from durability curve 1).



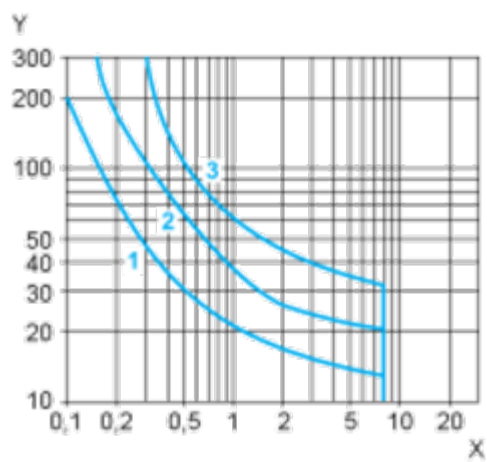
X Power factor on breaking (cos φ)
Y Reduction factor k

Example: An LC1-F185 contactor supplied with 115 V/50 Hz for a consumption of 55 VA or a current consumption equal to 0.1 A and cos φ = 0.3. For 0.1 A, curve 1 indicates a durability of approximately 1.5 million operating cycles. As the load is inductive, it is necessary to apply a reduction coefficient k to this number of cycles as indicated by curve 2.

For cos φ = 0.3: k = 0.6 The electrical durability therefore becomes: 1.5×10^6 operating cycles $\times$ 0.6 = 900 000 operating cycles.



D. C. Load Limit Curve



- X Current in A
- Y Voltage in V
- 1 L/R = 20 ms
- 2 L/R with load protection diode
- 3 Resistive load

Technical Description

Function A : Power on Delay Relay

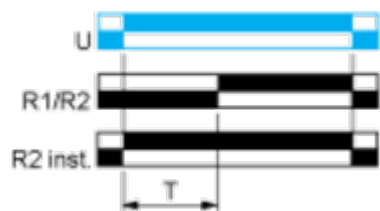
Description

The timing period T begins on energisation. After timing, the output(s) R close(s). The second output can be either timed or instantaneous.

Function: 1 Output



Function: 2 Outputs



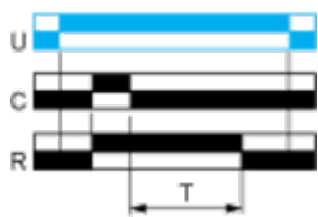
2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

Function C : Off-Delay Relay with Control Signal

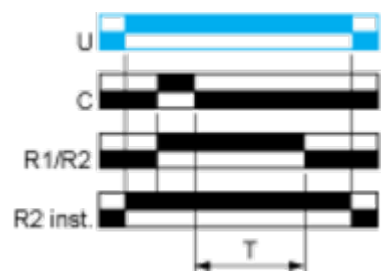
Description

After power-up and closing of the control contact C, the output R closes. When control contact C re-opens, timing T starts. At the end of the timing period, the output(s) R revert(s) to its/their initial state. The second output can be either timed or instantaneous.

Function: 1 Output



Function: 2 Outputs



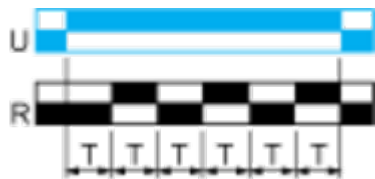
2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

Function D : Symmetrical Flasher Relay (Starting Pulse Off)

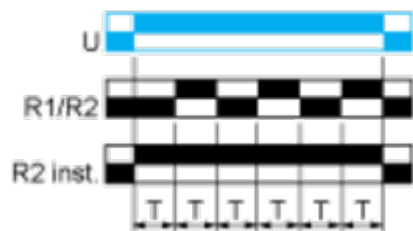
Description

Repetitive cycle with two timing periods T of equal duration, with output(s) R changing state at the end of each timing period T.
The second output can be either timed or instantaneous.

Function: 1 Output



Function: 2 Outputs



2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

Function Di : Symmetrical Flasher Relay (Starting Pulse On)

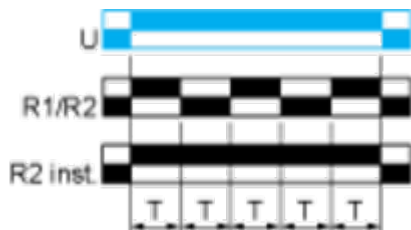
Description

Repetitive cycle with two timing periods T of equal duration, with output(s) R changing state at the end of each timing period T.
The second output can be either timed or instantaneous.

Function: 1 Output



Function: 2 Outputs



2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

Function H : Interval Relay

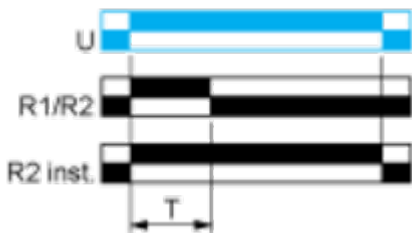
Description

On energisation of the relay, timing period T starts and the output(s) R close(s). At the end of the timing period T, the output(s) R revert(s) to its/their initial state. The second output can be either timed or instantaneous.

Function: 1 Output



Function: 2 Outputs



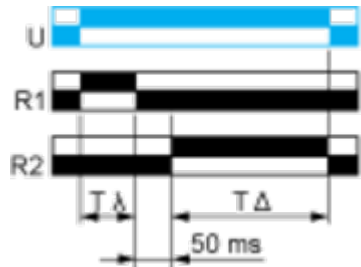
2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

Function Qg: Star-Delta Timing

Description

Timing for star-delta starter with contact for switching to star connection.

Function: 1 Output

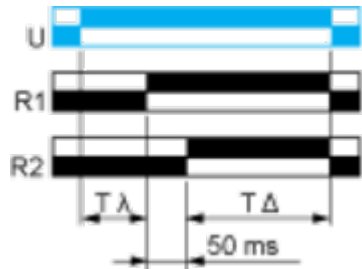


Function Qt: Star-Delta Timing

Description

Timing for star-delta starter with double On-delay period.

Function: 1 Output



Function W : Interval Relay with Control Signal Off

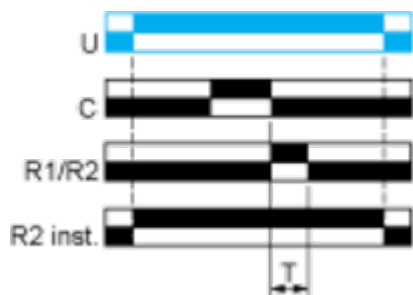
Description

After power-up and opening of the control contact, the output(s) close(s) for a timing period T.
At the end of this timing period the output(s) revert(s) to its/their initial state.
The second output can be either timed or instantaneous.

Function: 1 Output



Function: 2 Outputs



2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.).

Legend

-  Relay de-energised
-  Relay energised
-  Output open
-  Output closed

C	Control contact
G	Gate
R	Relay or solid state output
R1/R2	2 timed outputs
R2 inst.	The second output is instantaneous if the right position is selected
T	Timing period
Ta -	Adjustable On-delay
Tr -	Adjustable Off-delay
U	Supply