

**Relè per il controllo
asimmetria tensioni,
sequenza e mancanza fasi
2 Moduli**

Linea trifase 380...415V 50 e 60Hz
Soglia asimmetria tensioni regolabile 5...25%
Ritardo intervento regolabile 0,2...10s
1 contatto di allarme

**Relay to check voltage
asymmetry, sequence
and lack of phases
2 Module**

Three phase line 380...415V 50 and 60Hz
Voltage asymmetry threshold adjustable 5...25%
Adjustable intervention time 0,2...10s
1 alarm output

RM2S

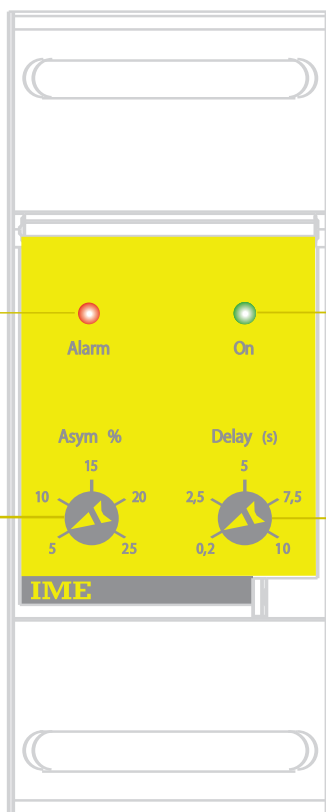


Segnalazione intervenuto allarme
Alarm intervention

Segnalazione apparecchio alimentato
Monitoring fed meter

Selezione soglia intervento
Setting intervention threshold

Selezione ritardo intervento
Setting intervention delay



CODICI DI ORDINAZIONE ORDERING CODE	AL. AUSILIARIA AUX. SUPPLY	INGRESSO INPUT
RM2S41	380 - 415V ca/ac	50 - 60Hz

ALLARME

Sequenza fasi: errata sequenza collegamento fasi
Mancanza fase: assenza di una o più fasi
Asimmetria fasi: squilibrio tra le tensioni superiore alla soglia impostata

INGRESSO

Tensione nominale: 380...415V (fase-fase)
Forma d'onda: sinusoidale, fattore di forma 1,11
Frequenza nominale: 50 - 60Hz (selezionabile)
Autoconsumo: $\leq 2,7VA$

PREDISPOSIZIONE

Soglia intervento asimmetria: regolabile con continuità a mezzo trimmer
Campo predisposizione intervento: 5...25%
Tempo di intervento: regolabile con continuità a mezzo trimmer
Campo predisposizione intervento: 0,2...10s
Ripristino: automatico

SEGNALAZIONE

Strumento alimentato: LED verde "ON"
Intervento allarme: LED rosso "Alarm" + commutazione relè

USCITA

Relè: 1 contatto di scambio SPDT
Portata contatti: 5A 250Vca $\cos\varphi$ 1 - 3A 250Vca $\cos\varphi$ 0,4 - 5A 30Vcc
Esecuzione sicurezza positiva/incondizionata (relè normalmente eccitato)

ALIMENTAZIONE AUSILIARIA

Alimentazione ausiliaria derivata dalla misura (autoalimentato)

ISOLAMENTO (EN 60439-1, EN 61010-1)

Categoria di installazione: III
Grado di inquinamento: 2
Tensione di riferimento per l'isolamento: 450V
Prova di tensione a impulso 5kV 1,2/50µs 0,5J
Circuiti considerati: ingresso, uscita relè
Prova a tensione alternata 2,5kV valore efficace 50Hz/1 min
Circuiti considerati: ingresso, uscita relè
Prova a tensione alternata 4kV valore efficace 50Hz/1 min
Circuiti considerati: tutti i circuiti e massa

COMPATIBILITA' ELETTROMAGNETICA (EMC)

Prove a emissione di accordo con EN 50081-1, EN 55011
Prove di immunità in accordo con EN 50082-2

CONDIZIONI AMBIENTALI

Temperatura di riferimento (EN60255-6): 20°C $\pm$ 2°C
Temperatura di impiego (EN60255-6): -5...40°C
Temperatura limite di funzionamento: -10...55°C
Temperatura di magazzino (EN60255-6): -40...70°C
Adatto all'utilizzo in climi tropicali

Massima potenza dissipata¹: $\leq 2W$

¹Per il dimensionamento termico dei quadri

ALARM

Phase sequence: wrong sequence on phase connection
Lack of phase: lacking of one or more phases
Phase asymmetry: unbalanced between the voltages higher than set threshold

INPUT

Rated voltage: 380...415V (phase-phase)
Waveform: sinusoidal, form factor 1,11
Rated frequency: 50 - 60Hz (selectable)
Rated burden: $\leq 2,7VA$

SETTING UP

Asymmetry intervention threshold: continuously adjustable by trimmer
Adjustable range: 5...25%
Intervention time: continuously adjustable by trimmer
Adjustable range: 0,2...10s
Reset: automatic

SIGNALING

Power ON: green LED "ON"
Alarm intervention: red LED "Alarm" + relay switching

OUTPUT

Relay: 1 SPDT contact
Contact range: 5A 250Vac $\cos\varphi$ 1 - 3A 250Vac $\cos\varphi$ 0,4 - 5A 30Vdc
Execution with positive security (normally energised relay)

AUXILIARY SUPPLY

Supply taken from measurement (selfsupplied)

INSULATION (EN 60439-1, EN 61010-1)

Installation category: III
Pollution degree: 2
Insulation reference voltage: 450V
Impulse voltage test 5kV 1,2/50µs 0,5J
Considered circuits: input, relay output
A.C. voltage test 2,5kV r.m.s. 50Hz/1 min
Considered circuits: input, relay output
A.C. voltage test 4kV r.m.s. 50Hz/1 min
Considered circuits: all circuits and earth

ELECTROMAGNETIC COMPATIBILITY (EMC)

Emission tests according to EN 50081-1, EN 55011
Immunity tests according to EN 50082-2

ENVIRONMENTAL CONDITIONS

Reference temperature (EN60255-6): 20°C $\pm$ 2°C
Specified operating range (EN60255-6): -5...40°C
Temperatura limite di funzionamento: -10...55°C
Limit range for storage and transport (EN60255-6): -40...70°C
Suitable for tropical climates

Max. power dissipation¹: $\leq 2W$

¹For switchboard thermal calculation

CUSTODIA

Custodia: 2 moduli DIN 43880

Connessioni: morsetti a vite

Portata morsetti: cavo rigido min. 4mm² / max. 35mm²
cavo flessibile min. 10mm² / max. 25mm²

Fissaggio: binario 35mm (EN50022)

Materiale custodia: makrolon autoestinguente

Grado di protezione (EN60529): IP40 frontale, IP20 morsetti

Peso: 200 grammi

HOUSING

Custodia: 2 moduli DIN 43880

Connections: screw terminals

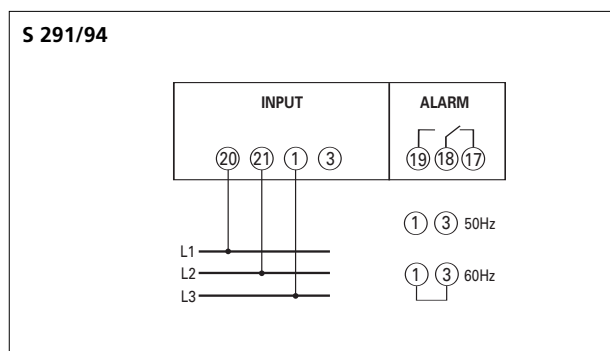
Terminals range:	rigid cable	min. 4mm ² / max. 35mm ²
	flexible cable	min. 10mm ² / max. 25mm ²

Mounting: rail 35mm (EN50022)

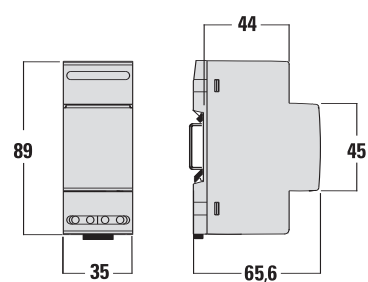
Housing material: self-extinguishing makrolon

Protection degree (EN60529): IP40 front frame, IP20 terminals

Weight: 200 grams

SCHEMA D'INSERZIONE WIRING DIAGRAM

DIMENSIONI ***DIMENSIONS***



Relais pour le contrôle de l'asymétrie de la tension, séquence et manque de phase 2 Modules

Réseau triphasé 380...415V 50 et 60Hz
Seuil de l'asymétrie de tension réglable 5...25%
Temporisation réglable 0,2...10s
1 sortie alarme

Relay to check voltage asymmetry, sequence and lack of phases 2 Module

Three phase line 380...415V 50 and 60Hz
Voltage asymmetry threshold adjustable 5...25%
Adjustable intervention time 0,2...10s
1 alarm output

Delta M RM2S

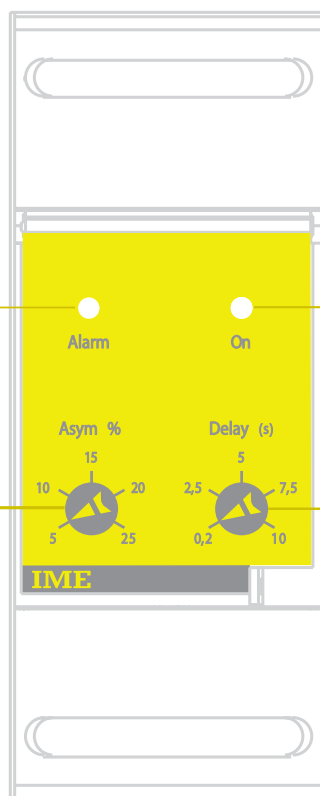


Signalisation de l'intervention de l'alarme
Alarm intervention

Signalisation de l'alimentation de l'appareil
Monitoring fed meter

Sélection du seuil d'intervention
Setting intervention threshold

Signalisation du délai d'intervention
Setting intervention delay



REFERENCE ORDERING CODE	ALIMENTATION AUXILIAIRE AUX. SUPPLY	ENTREE INPUT
4021 9000	380 - 415V ca /ac	50 - 60Hz

ALARME

Séquence de phase: séquence erronée sur le raccordement de phase

Manque de phase: manque d'une ou plusieurs phases

Asymétrie de phase: non équilibré entre les tensions supérieures au seuil sélectionné

ENTREE

Tension nominal: 380...415V (phase-phase)

Forme d'onde: sinusoïdale, facteur de forme 1,11

Fréquence nominale: 50 – 60Hz (sélectionnable)

Autoconsommation: $\leq 2,7\text{VA}$

REGLAGES

Seuil d'intervention asymétrique: réglable continuellement par potentiomètre

Choix des temporisations: 5...25%

Temporisation: réglable par potentiomètre

Choix des temporisations: 0,2...10s

Remise à zéro: automatique

SIGNALISATION

Instrument alimenté: LED verte "ON"

Intervention de l'alarme: LED rouge "Alarm" + commutation relais

SORTIE

Relais: 1 contact SPDT

Pouvoir de coupure: 5A 250Vca $\cos\varphi$ 1 - 3A 250Vca $\cos\varphi$ 0,4 - 5A 30Vcc

Exécution en sécurité positive (relais normalement excité)

ALIMENTATION AUXILIAIRE

Alimentation dérivée de la mesure (autoalimenté)

ISOLEMENT

(EN 60439-1, EN 61010-1)

Catégorie de l'installation: III

Degré de pollution: 2

Tension de référence pour l'isolement: 450V

Tension d'essai 5kV impulsion normalisée 1,2/50µs 0,5J

Circuits considérés: entrée, sortie relais

Tension d'essai 2,5kV valeur efficace 50Hz/1 min

Circuits considérés: entrée, sortie relai

Tension d'essai 4kV valeur efficace 50Hz/1 min

Circuits considérés: tous les circuits et la masse

COMPATIBILITE ELECTROMAGNETIQUE

(EMC)

Essai d'émission selon la norme EN 50081-1, EN 55011

Essai d'immunité selon la norme EN 50082-2

CONDITIONS D'UTILISATION

Température de référence (EN60255-6): $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$

Température d'utilisation (EN60255-6): $-5...40^{\circ}\text{C}$

Température limite de fonctionnement: $-10...55^{\circ}\text{C}$

Température limite de stockage et de transport (EN60255-6): $-40...70^{\circ}\text{C}$

Adapté pour l'utilisation en climat tropical

Puissance max. dissipée: $\leq 2\text{W}$

¹Pour le dimensionnement thermique du coffret

ALARM

Phase sequence: wrong sequence on phase connection

Lack of phase: lacking of one or more phases

Phase asymmetry: unbalanced between the voltages higher than set threshold

INPUT

Rated voltage: 380...415V (phase-phase)

Waveform: sinusoidal, form factor 1,11

Rated frequency: 50 – 60Hz (selectable)

Rated burden: $\leq 2,7\text{VA}$

SETTING UP

Asymmetry intervention threshold: continuously adjustable by trimmer

Adjustable range: 5...25%

Intervention time: continuously adjustable by trimmer

Adjustable range: 0,2...10s

Reset: automatic

SIGNALING

Power ON: green LED "ON"

Alarm intervention: red LED "Alarm" + relay switching

OUTPUT

Relay: 1 SPDT contact

Contact range: 5A 250Vac $\cos\varphi$ 1 - 3A 250Vac $\cos\varphi$ 0,4 - 5A 30Vdc

Execution with positive security (normally energised relay)

AUXILIARY SUPPLY

Supply taken from measurement (selfsupplied)

INSULATION

(EN 60439-1, EN 61010-1)

Installation category: III

Pollution degree: 2

Insulation reference voltage: 450V

Impulse voltage test 5kV 1,2/50µs 0,5J

Considered circuits: input, relay output

A.C. voltage test 2,5kV r.m.s. 50Hz/1 min

Considered circuits: input, relay output

A.C. voltage test 4kV r.m.s. 50Hz/1 min

Considered circuits: all circuits and earth

ELECTROMAGNETIC COMPATIBILITY

(EMC)

Emission tests according to EN 50081-1, EN 55011

Immunity tests according to EN 50082-2

ENVIRONMENTAL CONDITIONS

Reference temperature (EN60255-6): $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$

Specified operating range (EN60255-6): $-5...40^{\circ}\text{C}$

Temperatura limite di funzionamento: $-10...55^{\circ}\text{C}$

Limit range for storage and transport (EN60255-6): $-40...70^{\circ}\text{C}$

Suitable for tropical climates

Max. power dissipation¹: $\leq 2\text{W}$

BOITIER

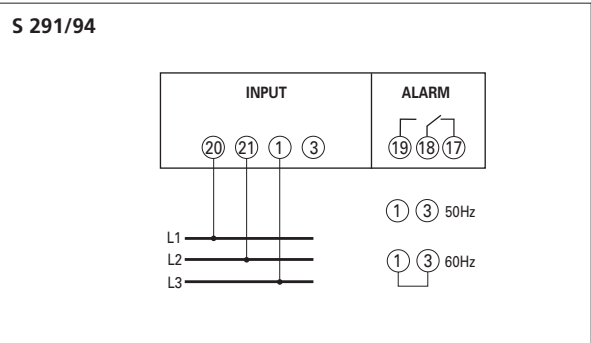
Boîtier: 2 modules DIN 43880
Raccordement: bornier à vis
Capacité des bornes : fil rigide min. 4mm² / max. 35mm² fil souple min. 10mm² / max. 25mm²
Fixation: rail 35mm (EN50022)
Matériaux du boîtier: makrolon autoextinguible
Degré de protection (EN60529): IP40 face avant, IP20 bornes
Poids: 200 grammes

¹For switchboard thermal calculation

HOUSING

Custodia: 2 moduli DIN 43880
Connections: screw terminals
Terminals range: rigid cable min. 4mm² / max. 35mm² flexible cable min. 10mm² / max. 25mm²
Mounting: rail 35mm (EN50022)
Housing material: self-extinguishing makrolon
Protection degree (EN60529): IP40 front frame, IP20 terminals
Weight: 200 grams

SCHEMA DE RACCORDEMENT WIRING DIAGRAM



DIMENSIONS DIMENSIONS

