



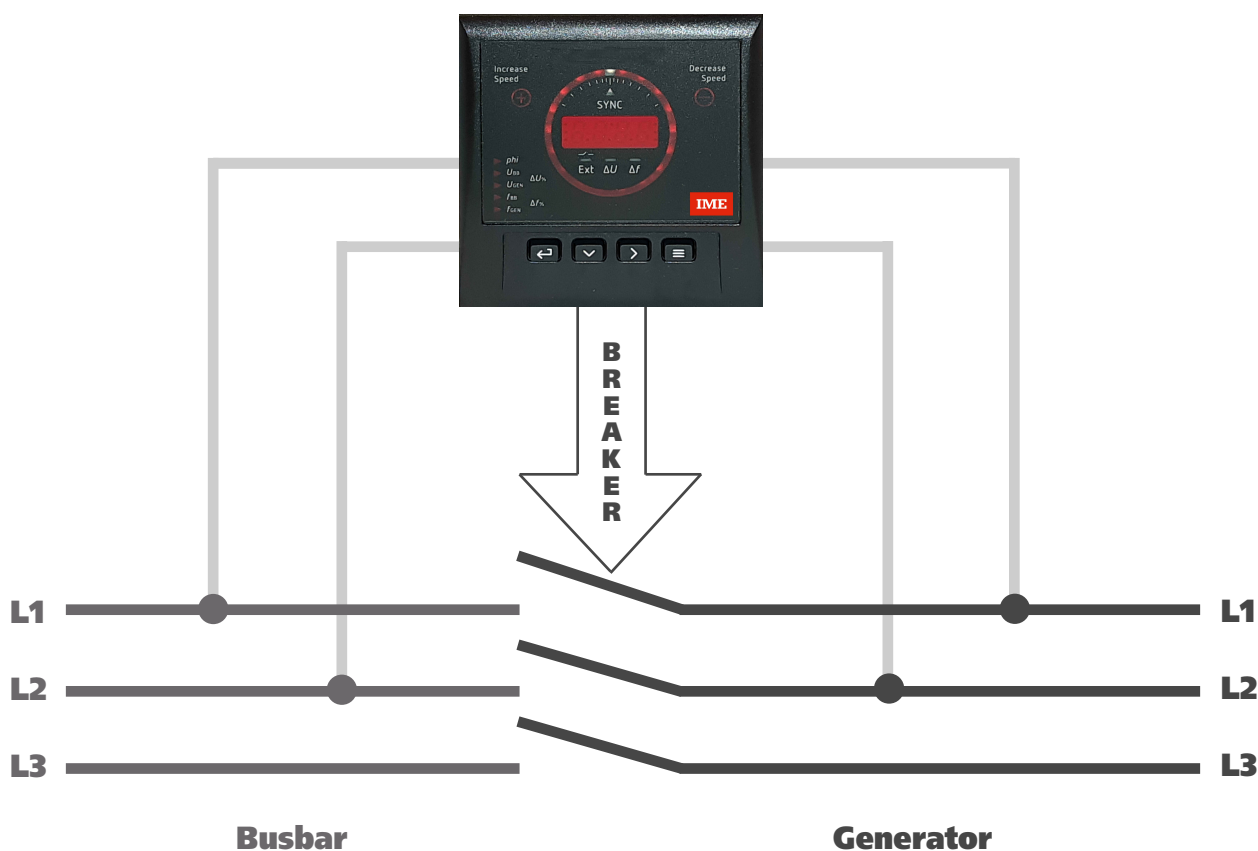
Relè di Sincronismo a LED con contatto 96x96mm

Programmabile da tastiera
Misura e visualizzazione parametri di
sincronizzazione
Differenza percentuale tensione
Differenza percentuale frequenza
Angolo di fase
Sincronizzazione manuale, assistita o automatica
Uscita relè sincronismo
Ingresso tensione 30...150V – 110...620V
Ingresso frequenza 35...80Hz

Synchronism Relay with LED to contact 96x96mm

Configurable by keyboard
Measure and display synchronism
parameters
Voltage difference percentage
Frequency difference percentage
Phase angle
Manual, assisted, automatic synchronism
Synchronism output relay
Voltage input 30...150V – 110...620V
Frequency input 35...80Hz

SYNCR0 96C



CODICE DI ORDINAZIONE ORDERING CODE	AL. AUSILIARIA AUX. SUPPLY		INGRESSO TENSIONE INPUT VOLTAGE	INGRESSO FREQUENZA INPUT FREQUENCY
	ca / ac	cc / dc		
ANTJ10	-	24V	110...600V	35...80Hz
ANTJ11	-	24V	30...150V	35...80Hz
ANTJ21	110V	-	30...150V	35...80Hz
ANTJ30	400V	-	110...600V	35...80Hz

VISUALIZZAZIONE

Display LED rossi, alta efficienza

Grandezze visualizzate:

Φ	angolo di fase
V_{BB}	tensione di linea
V_{GEN}	tensione generatore
$\Delta V\%$	differenza tensioni
Fr_{BB}	frequenza di linea
Fr_{GEN}	frequenza generatore
$\Delta Fr\%$	differenza frequenze

Precisione:

tensione $\pm 1\% + 2$ digit
frequenza $\pm 0,01\text{Hz}$
angolo di fase $\pm 0,5^\circ$

Messaggi visualizzati:

generatore veloce
generatore lento
relè sincronismo attivato
condizione di sincronismo (funzionamento manuale)

Barra LED: indicazione analogica sincronismo (sincronoscopio)

LED segnalazione:

bassa frequenza
alta frequenza
tensione entro il $\emptyset V$ programmato
frequenza entro il $\emptyset F$ programmato
abilitazione relè sincronismo

INGRESSO

Tensione di misura: 30...150V – 110...620V

Sovraccarico permanente: 800V

Frequenza di misura: 35...80Hz

Autoconsumo: < 500 μ A

PROGRAMMAZIONE

Tramite tastiera frontale, 4 tasti

Accesso programmazione protetto da password

PRAMETRI PROGRAMMABILI

Massima differenza di tensione accettabile

Massima differenza di frequenza accettabile

Tempo di contatto (ritardo eccitazione bobina – chiusura contatto)

Modo operativo: manuale, assistito, automatico

Attivazione relè sincronismo: connessione continua o pulsante

Tempo impulso relè sincronismo

ALIMENTAZIONE AUSILIARIA

Valore nominale U_{aux} : 110 - 400Vca - 24Vcc

Variazione ammassa: 95...126V(110V) - 360...440V(400V) - 18...36V(24Vcc)

Frequenza nominale: 50 e 60Hz

Variazione ammassa: 35...450Hz

Autoconsumo: $\leq 10\text{VA}$

DISPLAY

Red LED display, high efficiency

Display quantities:

Φ	phase angle
V_{BB}	busbar voltage
V_{GEN}	generator voltage
$\emptyset V\%$	voltage difference
Fr_{BB}	busbar frequency
Fr_{GEN}	generator frequency
$\emptyset Fr\%$	frequency difference

Accuracy:

voltage $\pm 1\% + 2$ digit
frequency $\pm 0,01\text{Hz}$
phase angle $\pm 0,5^\circ$

Messages display:

fast generator
slow generator
synchronism relay activated
synchronism condition (manual mode)

Bargraph: analogue simulation (synchronoscope)

LED signalling:

lower frequency
higher frequency
voltage within programmed $\emptyset V$
frequency within programmed $\emptyset F$
synchronism relay enabled

INPUT

Measuring voltage: 30...150V – 110...620V

Continuous overload: 800V

Measuring frequency: 35...80Hz

Rated burden: < 500 μ A

PROGRAMMING

Front keyboard, 4 keys

Programming access protected by password

PROGRAMMABLES PARAMETERS

Maximum voltage difference

Maximum frequency difference

Breaker response time (delay time excited coil – contact closed)

Operation modes: manual, assisted, automatic

Synchronism relay activation: continuous or pulse

Pulse time

AUXILIARY SUPPLY

Rated value U_{aux} : 110 - 400Vca - 24Vdc

Tolerance: 95...126V(110V) - 360...440V(400V) - 18...36V(24Vdc)

Rated frequency: 50 and 60Hz

Tolerance: 35...450Hz

Rated burden: $\leq 10\text{VA}$

USCITA

Relè sincronizzazione: contatto SPDT
Portata contatti: 250V 8Aca / 30V 5Acc

CONDIZIONI AMBIENTALI

Temperatura di funzionamento: -10...65°C
Temperatura di immagazzinaggio: -40...70°C

CUSTODIA

Dimensioni: frontale 96x96mm DIN43700
Profondità: 81,5mm
Fissaggio: incasso (foratura pannello 92x92mm)
Conessioni: morsetti fissaggio a vite
Materiale custodia: ABS autoestinguente
Grado di protezione (EN60529): IP54 (frontale) IP20 (morsettiera)
Opzione: protezione frontale IP65
Peso: 350 grammi

OUTPUT

Synchronism relay: SPDT contacts
Contacts range: 250V 8Aac / 30V 5Adc

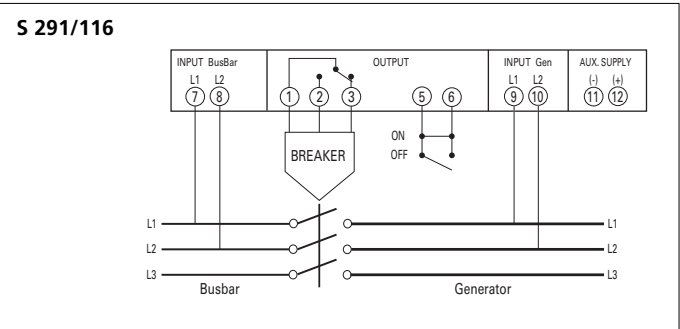
ENVIRONMENTAL CONDITIONS

Operating temperature: -10...65°C
Storage temperature: -40...70°C

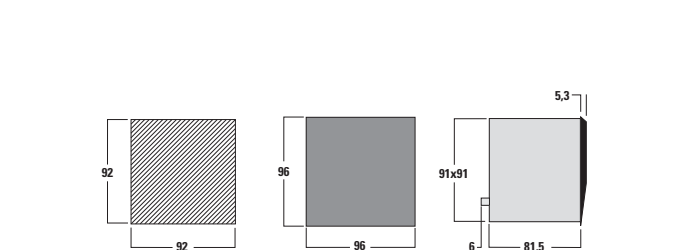
HOUSING

Dimensions: front frame 96x96mm DIN43700
Depth: 81,5mm
Mounting: flush mounting (panel cutout 92x92mm)
Connections: screw terminals
Housing material: self-extinguishing ABS
Protection degree (EN60529): IP54 (front frame) IP20 (terminals)
Option: protection degree IP65 (front frame)
Weight: 350 grams

SCHEMA D'INSERIZIONE WIRING DIAGRAM



DIMENSIONI DIMENSIONS





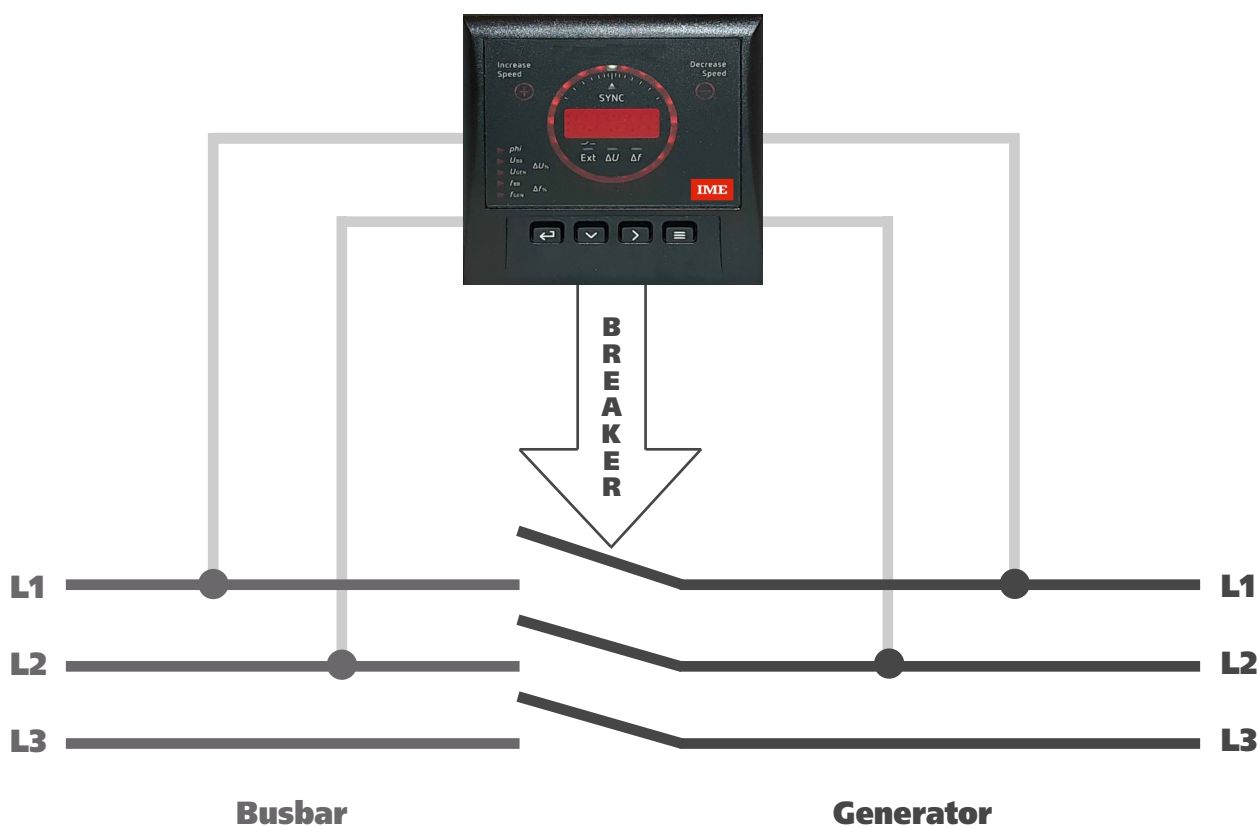
Relais de synchronisation
à LED avec contact
96x96mm

Programmable par touche
Mesure et affichage des paramètres
de synchronisation
Différence de pourcentage de tension
Différence de pourcentage de fréquence
Angle de phase
Synchronisation manuelle, assistée, automatique
Synchronisation de la sortie relais
Entrée tension 30...150V – 110...620V
Entrée fréquence 35...80Hz

Synchronism Relay
with LED to contact
96x96mm

Configurable by keyboard
Measure and display synchronism
parameters
Voltage difference percentage
Frequency difference percentage
Phase angle
Manual, assisted, automatic synchronism
Synchronism output relay
Voltage input 30...150V – 110...620V
Frequency input 35...80Hz

SYNPRO 96C



REFERENCE ORDERING CODE	ALIMENTATION AUXILIAIRE <i>AUX. SUPPLY</i>		ENTREE TENSION INPUT VOLTAGE	ENTREE FREQUENCE INPUT FREQUENCY
	ca / ac	cc / dc		
6017 2660	-	24V	110...600V	35...80Hz
6017 2670	-	24V	30...150V	35...80Hz
6017 2600	110V	-	30...150V	35...80Hz
6017 2650	400V	-	110...600V	35...80Hz

AFFICHAGE

Affichage LED rouge, haute efficacité

Grandeurs affichées:

Φ	angle de phase
V_{BB}	tension du réseau
V_{GEN}	tension du générateur
$\Delta V\%$	différence de tension
F_{rBB}	fréquence du réseau
F_{rGEN}	fréquence du générateur
$\Delta F\%$	différence de fréquence

Précision:

tension $\pm 1\% + 2$ digit
fréquence $\pm 0,01\text{Hz}$
angle de phase $\pm 0,5^\circ$

Messages affichés:

générateur rapide
générateur lent
synchronisation du relais activée
condition de synchronisation (fonction manuelle)

Barre LED: indication analogique de la synchronisation (synchroscope)

signalisation LED :

basse fréquence
haute fréquence
tension dans les limites ΔV programmées
fréquence dans les limites ΔF programmées
relais de synchronisation autorisé

ENTREE

Tension de mesure: 30...150V – 110...620V

Surcharge permanente: 800V

Fréquence de mesure: 35...80Hz

Autoconsommation: < 500 μ A

PROGRAMMATION

Clavier en façade, 4 touches

Accès à la programmation protégé par un mot de passe

PARAMÈTES PROGRAMMABLES

Différence max. de la tension autorisée

Différence max. de la fréquence autorisée

Temps de réponse (pour l'excitation de la bobine - pour fermer le contact)

Mode opératoire: manuel, assisté, automatique

Activation du relais de synchronisation: continu ou pulsé

Temps de l'impulsion du relais de synchronisation

ALIMENTATION AUXILIAIRE

Valeur nominale U_{aux} : 110 - 400Vac - 24Vcc

Variation admissible: 95...126V(110V) - 360...440V(400V) - 18...36V(24Vcc)

Fréquence nominale: 50 et 60Hz

Variation admissible: 35...450Hz

Autoconsommation: $\leq 10\text{VA}$

DISPLAY

Red LED display, high efficiency

Display quantities:

Φ	phase angle
V_{BB}	busbar voltage
V_{GEN}	generator voltage
$\Delta V\%$	voltage difference
F_{rBB}	busbar frequency
F_{rGEN}	generator frequency
$\Delta F\%$	frequency difference

Accuracy:

voltage $\pm 1\% + 2$ digit
frequency $\pm 0,01\text{Hz}$
phase angle $\pm 0,5^\circ$

Messages display:

fast generator
slow generator
synchronism relay activated
synchronism condition (manual mode)

Bargraph: analogue simulation (synchroscope)

LED signalling:

lower frequency
higher frequency
voltage within programmed ΔV
frequency within programmed ΔF
synchronism relay enabled

INPUT

Measuring voltage: 30...150V – 110...620V

Continuous overload: 800V

Measuring frequency: 35...80Hz

Rated burden: < 500 μ A

PROGRAMMING

Front keyboard, 4 keys

Programming access protected by password

PROGRAMMABLES PARAMETERS

Maximum voltage difference

Maximum frequency difference

Breaker response time (delay time excited coil – contact closed)

Operation modes: manual, assisted, automatic

Synchronism relay activation: continuous or pulse

Pulse time

AUXILIARY SUPPLY

Rated value U_{aux} : 110 - 400Vac - 24Vdc

Tolerance: 95...126V(110V) - 360...440V(400V) - 18...36V(24Vdc)

Rated frequency: 50 and 60Hz

Tolerance: 35...450Hz

Rated burden: $\leq 10\text{VA}$

SORTIE

Relais de synchronisation: contact SPDT

Pouvoir de coupure: 250V 8Aac / 30V 5Adc

CONDITIONS D’UTILISATION

Température de fonctionnement: -10...65°C

Température de stockage: -40...70°C

BOITIER

Dimensions: façade 96x96mm DIN43700

Profondeur: 81,5mm

Montage: encastré (découpe panneau 92x92mm)

Raccordement: bornier à vis

Matériau du boîtier: ABS autoextinguible

Degré de protection (EN60529): IP54 (face avant) IP20 (bornes)

Option: degré de protection face avant IP65

Poids: 350 grammes

OUTPUT

Synchronism relay: SPDT contacts

Contacts range: 250V 8Aac / 30V 5Adc

ENVIRONMENTAL CONDITIONS

Operating temperature: -10...65°C

Storage temperature: -40...70°C

HOUSING

Dimensions: front frame 96x96mm DIN43700

Depth: 81,5mm

Mounting: flush mounting (panel cutout 92x92mm)

Connections: screw terminals

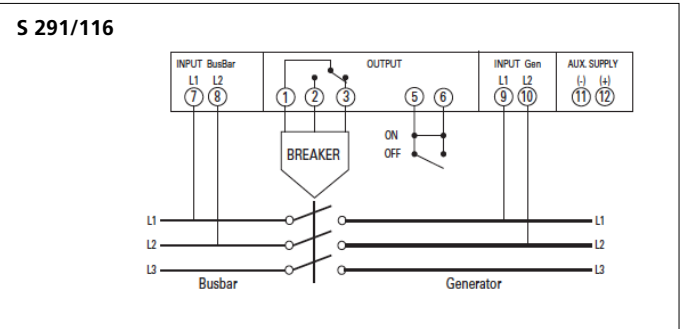
Housing material: self-extinguishing ABS

Protection degree (EN60529): IP54 (front frame) IP20 (terminals)

Option: protection degree IP65 (front frame)

Weight: 350 grams

SCHEMAS DE RACCORDEMENT WIRING DIAGRAM



DIMENSIONS DIMENSIONS

