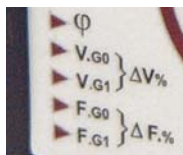
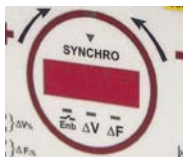


SYNCHRO Coupler Range

Measurement and instrumentation
Synchronization instruments for LV networks



Display of deviations between setpoint and measurement



IED display of 3 measurements :
phase ,frequency and voltage



user-programmable

PRODUCT ADVANTAGES

- + InteGrated In a 96 x 96 ForMat
- + 1 synchronization command
- + 1 control command
- + 3 command modes for synchronization
- + Adjustment in just a few seconds (PID model)

➤ Description

The SYNCHRO COUPLER is an automatic synchronization instrument for generator: sets .It includes a control relay for assisted time delay control pling with manual coupling or automatic cou

- two control relays (fast/slow) for speed adjustment
- an external control loop for opening the coupling relay
- four front panel keys for programming , option included(display and messages) password



SynChro



phase angle variations by 30 LEDs arranged in a circle

voltages ,frequencies ,variations (in%) on 4 digits

frequency variations , \pm status of coupler relay , conditions obtained in phase ,frequency and voltage

Power Supply	reference
24 VDC	IS9n 421X
48 VDC	IS9n 422X
110 VAC	IS9n 423X
230 VAC	IS9n 424X
400 VAC	IS9n 425X

COUPIER PID



Display :as for synchro coupler

PID adjustment method) Proportional Integral Derivative (for synchronization that is faster and more accurate than with conventional synchronous couplers

Proportional :proportional correction of measurement errors

Integral :guarantees reduction of adjustment error to 0

Derivative :brings greater stability to the system , enabling you to anticipate the inertia of generator sets (e.g.hydroelectric)

Power Supply	reference
24 VDC	IS9n 441X
48 VDC	IS9n 442X
110 VAC	IS9n 443X
230 VAC	IS9n 444X
400 VAC	IS9n 445X



➤ Electrical specifications

Measurements	
rated voltage range	110 to 600 V
Frequency	35 hz...80 hz
Permanent overvoltage	800 V
Consumption	>500 μ A
Relay output	
With sealed inverter contact	8 A -250 Vac /5 A -30 Vdc
Multi-measurement (accuracy)	
Phase angle deviation	$\pm 0.5^\circ$
Frequency	± 0.01 hz
Voltage(rMS)	Class 1 ± 2 digits
Auxiliary power supply	
AC voltage	-10+ / %15%
Frequency	35 hz...450 hz
Consumption	10 VA

➤ Environment

Operating temperature	-10°C to +65°C
Storage temperature	-40°C to +70°C
relative humidity	>90 %at 40°C
Protection rating	3
Pollution level	2

➤ Mechanical specifications

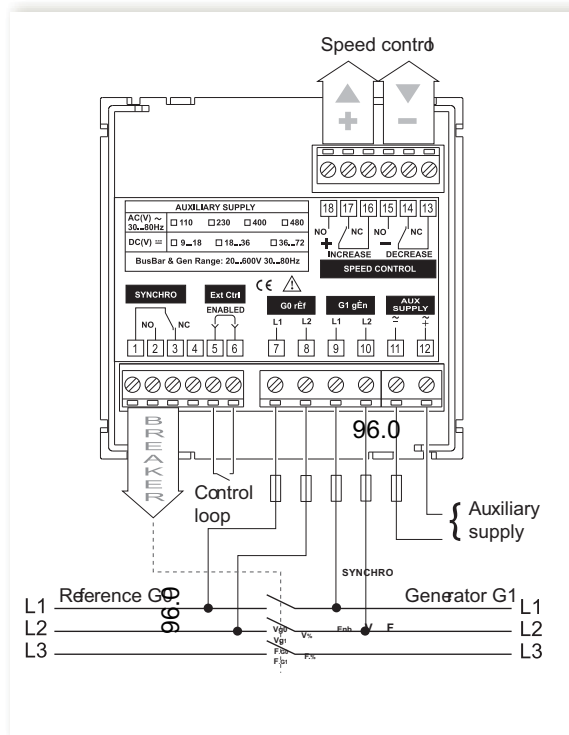
Casing materials	
Casing and flange	Self-extinguishing black ABS
Front panel	light grey polycarbonate
Protection rating	IP 54 front panel (IP65 optional)
Weight	350 g
Connection	holder for 2.5 mm wire
Fitting	Mounting on 8 mm front panel

➤ Standards

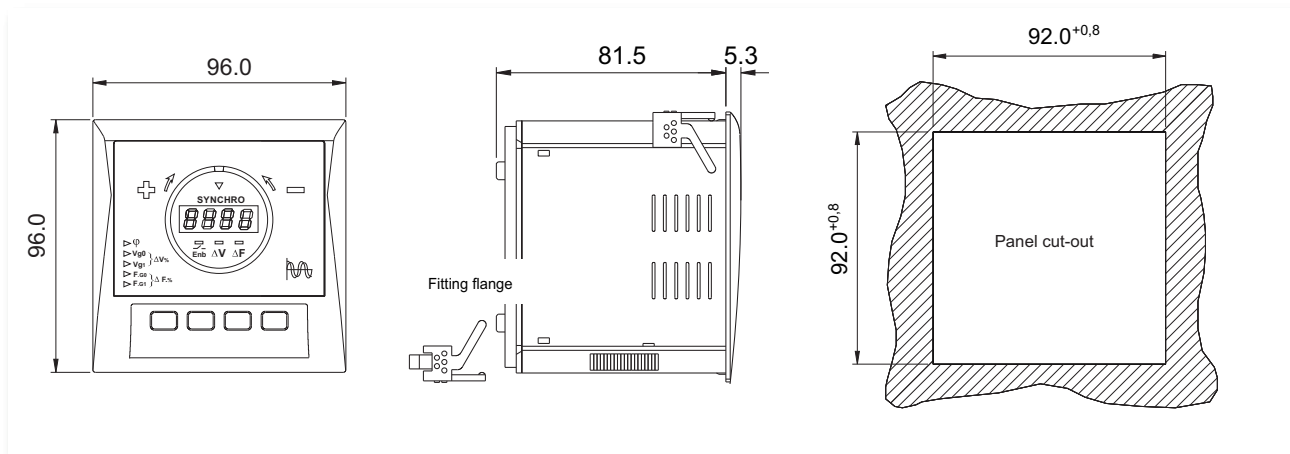
Reference standards	
Safety	IEC 61010-1
Dimensions	DIn 43700
EMC	En 61326-1
AnSI function	nos .25 and 90
resistance to shock	IEC 60068-2-27
resistance to vibrations	IEC 60068-2-6
Environment	IEC 60068-1



➔ Electrical connections



➔ Dimensions and drilling specifications (mm)



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