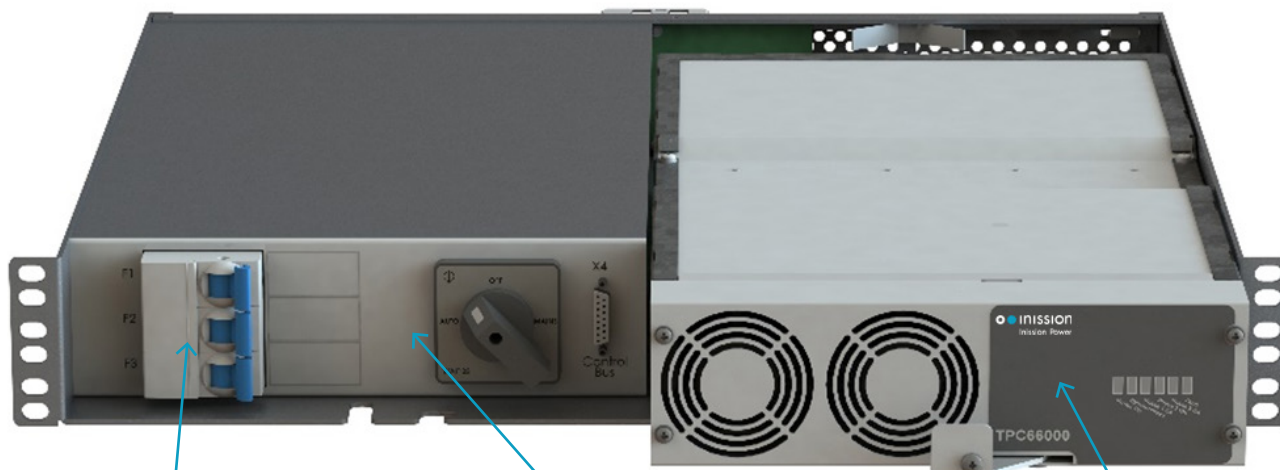


3-phase Synchronization Unit for DAC60000 Inverters

# TPC66000



AC output fuse  
3-phase

19" 1.5U subrack  
including 3-phase  
manual bypass

3-phase synchronization  
unit. Synchronizes the  
120° phase difference  
between static switches

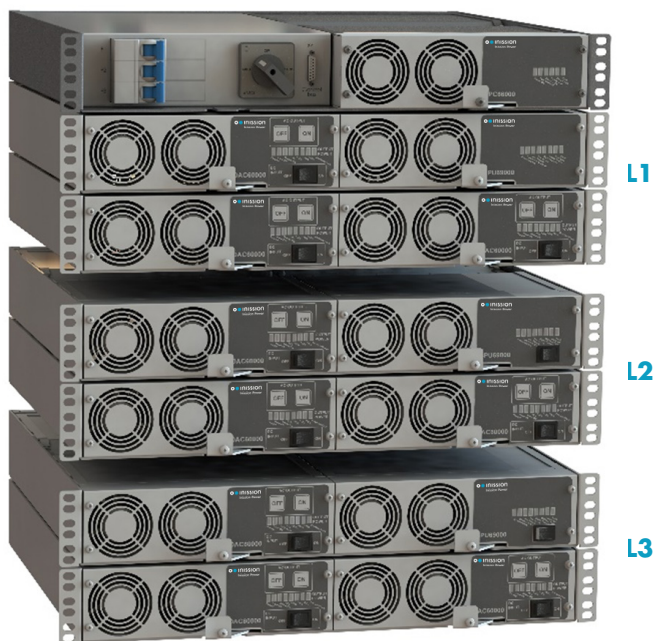
## Certifications



## Use cases



# 3-PHASE INVERTER SYSTEMS 4.5kVA – 22.5kVA



## Features

- » Modular architecture, 3-phase systems are built by same inverter modules as 1-phase systems
- » Small size, light weight, standard 19" rack
- » Flexibility to define power capacity and on-line/off-line default supply independently for each phase
- » SNMP for remote access, RS-232 with standard PC for local monitoring and parameter setting

## User programmable parameters

- » On-line/Off-line configuration
- » Minimum and maximum inverter RMS voltage conformity
- » Minimum and maximum mains RMS voltage conformity
- » Minimum and maximum mains frequency conformity
- » Maximum allowed mains frequency change rate

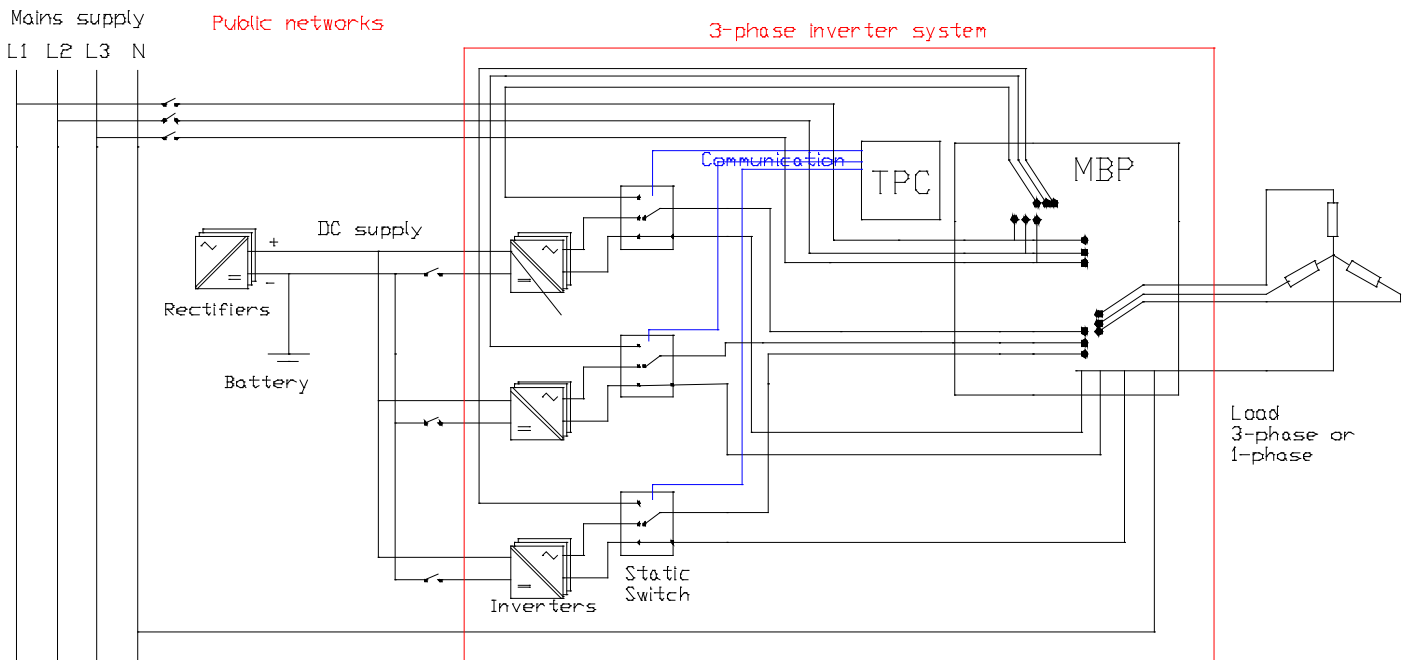
Modular 3-phase inverter systems 3 x 1.5 - 7.5kVA can be built with TPC synchronization unit and DAC60000 inverters. System includes one 19" 1.5U rack for 3-phase manual bypass and sync unit, which controls 3 separate 1-phase systems each including one static switch and 1-6 pcs of inverters. Secured 400/230VAC three phase power can be supplied to star connected loads.

# 3-PHASE SYNCHRONIZATION MODULE

Type	Description
TPC66100FR	3-phase synchronization plug-in module, 220 x 64 x 409 mm, 2kg

# 19" 1.5U POWERFRAMES (sub-racks)

Type	Description
<b>MBP68500</b>	Sub-rack including 3-phase manual bypass, AC-output fuses and position for TPC sync unit, 19" x 1.5U x 480mm, 5kg
<b>MBP68502</b>	Sub-rack including 3-phase manual bypass and position for TPC sync unit, 19" x 1.5U x 480mm, 5kg



# SPECIFICATION

## ELECTRICAL

Mains voltage	400/230VAC (L1-L2-L3, N, PE)	3-phase star connected mains
Inverter DC supply	Depending on the battery bank	24VDC, 48VDC, 60VDC, 110VDC, 125VDC
System output voltage 4	00/230VAC (L1-L2-L3, N, PE)	3-phase star connected loads or 1-phase loads
Power range	7.5kVA static switch	3 x 1.5 – 7.5kVA
Optional power range	30kVA static switch	3 x 1.5 – 30kVA
Synchronizing frequency	Nominal 50 Hz	User programmable 40-70 Hz
Mains input connectors	L1, L2, L3, N, PE	10mm2 screw terminals
Inverter/static switch input	Inverter system output to static switch Static switch inputs/outputs to man. bypass	With AC bus bars, M5 ring terminals 10mm2 screw terminals L1, L2, L3, N, PE
AC outputs connectors	L1, L2, L3, N, PE	10mm2 screw terminals
All connectors are located on rear panel		

## CONTROLS

3-phase manual bypass	Rotating switch K&N CA40 , 4 positions: Off–Mains–Sync–Auto	max current 40A, short circuit max 950A (1s)
Input protection	External fuse in mains input of each phase	MCB 40A B-, C- or D-curve or gG fuse 40A
Output protection, loads	3-phase manual bypass unit	C32A 3-phase MCB

## STANDARDS

Safety		EN 60950-1
EMC	Emissions without filter	EN61000-6-4, EN 55022A
	Emissions with filter	EN61000-6-3, EN 55022B
	Immunity	EN61000-6-2

## ALARMS AND INDICATORS

LED indications	TPC unit front panel	Power On – Synchronized – Phase 1 OK – Phase 2 OK – Phase 3 OK - Fault
Relay alarms	Alarms from static switch in each phase	Fault in system, Primary supply failure
Remote monitoring through RS-232		

## MECHANICALS

Dimensions & weight	See page 1	
Enclosure	hot galvanized steel	IP20
Front plate painted		RAL7035
Finger protection	Polycarbonate plate	Covers rear panel's screw terminals

## ENVIRONMENTAL

Temperature range	Operating	0...45 °C full power, 45...60 °C reduced power
Cooling		Natural