



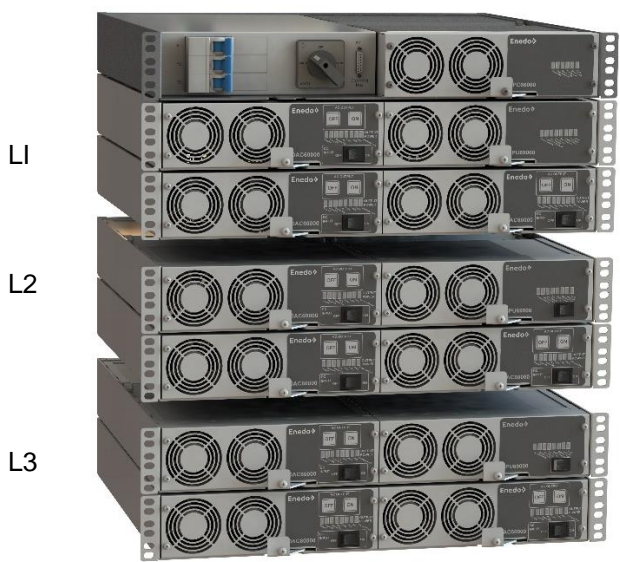
3-phase Synchronization Unit for DAC60000 Inverters



- 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

3-PHASE INVERTER SYSTEMS 4.5kVA – 22.5kVA

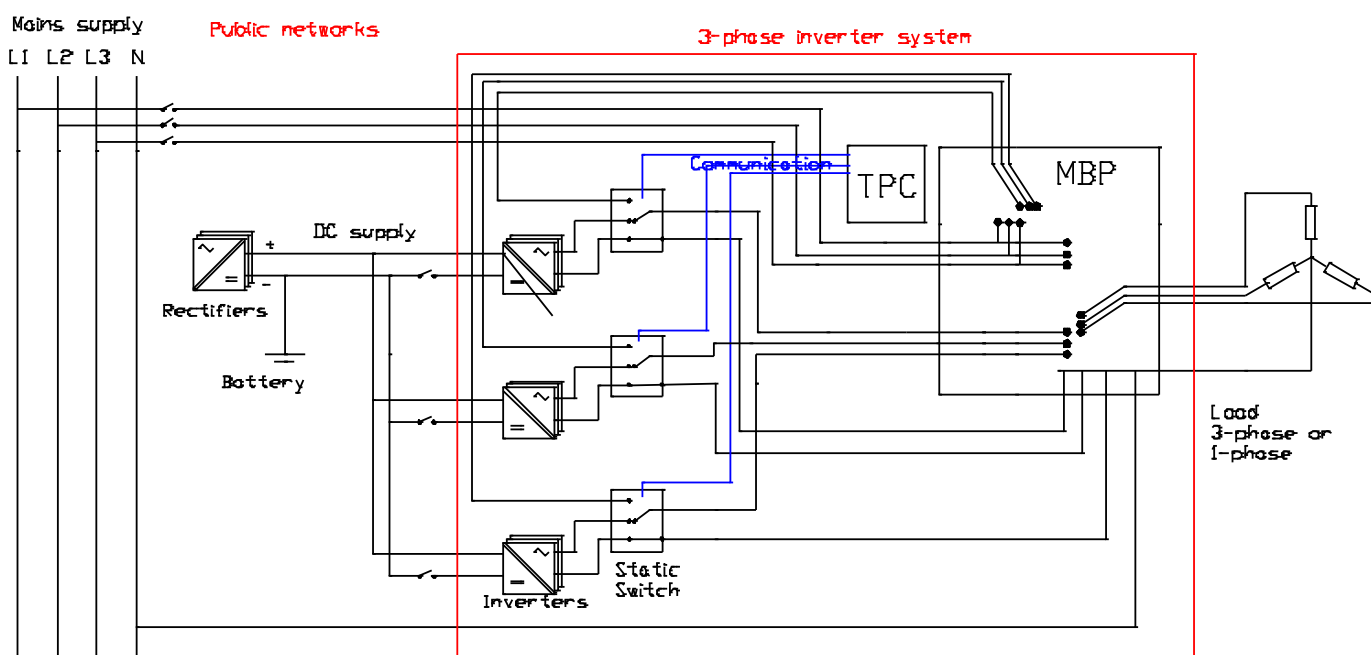
Modular 3-phase inverter systems 3 x 1.5 - 7.5kVA can be built with TPC synchronization unit and DAC60000 inverters. System includes one 19" 1.5U rack for 3-phase manual bypass and sync unit, which controls 3 separate 1-phase systems each including one static switch and 1-6 pcs of inverters. Secured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



- #### 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

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



(Check DRW03400)

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	400/230VAC (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	10mm ² screw terminals
Inverter/static switch input	Inverter system output to static switch	With AC bus bars, M5 ring terminals
	Static switch inputs/outputs to man. bypass	10mm ² screw terminals L1, L2, L3, N, PE
AC outputs connectors	L1, L2, L3, N, PE	10mm ² 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