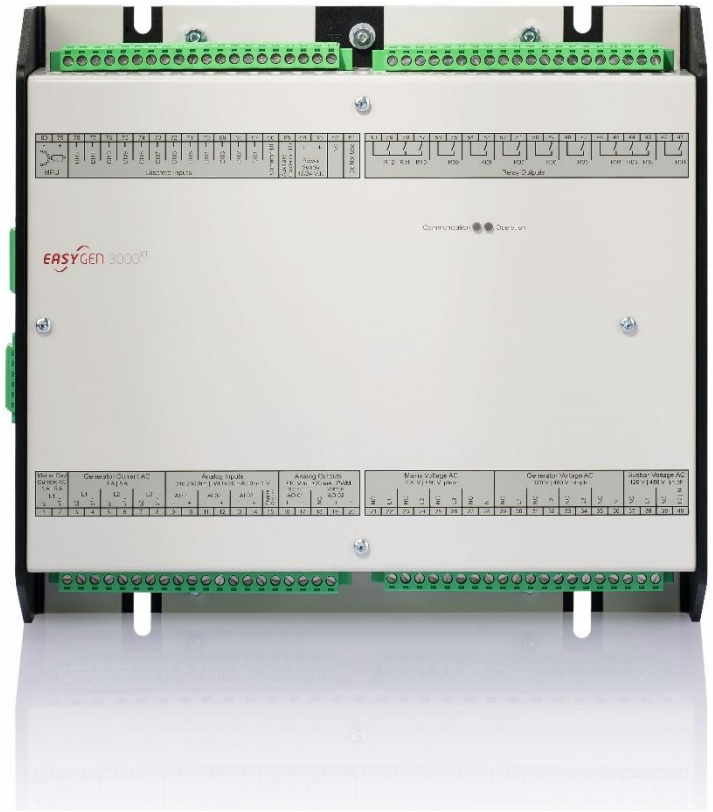
easYgen-3100XT/3200XT(-LT)

Introduction Presentation

Overview



easYgen-3100XT-P1

easYgen-3200XT-P1

CE marked

RoHS 2 COMPLIANT

UL US LISTED

61010, 6200

CSA

c UL US LISTED

EAC

ABS

Lloyd's Register

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easYgen-3200XT series controls benefits

- **High Flexibility and Reduced Efforts** for variants at different applications. One device fits most applications
- **Save Cost** for additional PLC as logical/analog operations can be handled by the controls LogicsManager / AnalogManager
- **Ensure High Robustness** against external disturbances by galvanic isolation of the measuring inputs, relay contacts, biasing outputs and communication interfaces
- **Simplified Configuration and Commissioning** through Ethernet & USB connectivity, On-board documentation and system update function
- **Drop-In Replacement** extends system longevity
- **Full** Mains, Generator and Engine **Protection** avoids additional protection relays
- **Enable Your Genset** to speak your local language at the touch of a button with 14 built-in languages

easYgen-3200XT – Product Features

- 3 Systems measurement (gen-set, utility and bus bar)
- Paralleling applications of up to 32 gen-sets in – Peak Shaving Operation, Stand-by Operation, AMF (Automatic Mains Failure) Operation, Emergency Operation, or Import/Export operation
- Master or slave control capability for diesel and gas gen-sets in island and utility parallel modes
- Open or closed transition control of up to 2 circuit breakers
- Load/var sharing and load dependent start/stop for genset fleet with same or different sizes
- Full mains, generator and engine protection
- LogicsManager and AnalogManager to create customized control commands
- 3 freely configurable PID governors for e.g. heating circuits
- Multi-lingual capability, supports 14 languages

easYgen-3200XT – Important Functions (1/2)

- True RMS measurement with 0,5% accuracy for voltage and current
- Automatic, manual, Test and Stop modes
- Synchronization
  - Slip frequency (Positive or Negative)
  - Phase matching
- Vector group adjustment to synchronize across transformers
- DynamicsLCD screen adapts to the configured application
- 2 programmable screens to visualize frequently used values
- 6 programmable alarm classes and 16 freely configurable alarms

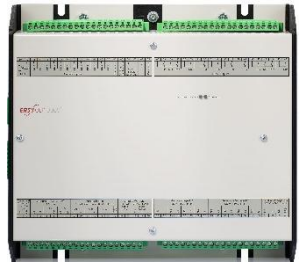
easYgen-3200XT – Important Functions (2/2)

- 2 CAN interfaces for field and engine bus
- Modbus-TCP interface via RJ-45 and Modbus-RTU interface via RS-485
- USB connectivity to the Woodward service tool ToolKit (CANopen and Ethernet support also)
- Up to 19 analog inputs (3 on-board, 16 via external expansion cards)
- Up to 6 analog outputs (2 on-board, 4 via external expansion cards)
- Display and evaluation of J1939 analog values, “supported SPNs”
- Direct support of common ECU like ADEC, Deutz, E3, EMS2, MAN, MTU, Scania, Volvo.
- In-field ECU support through sequencer files

easYgen-3200XT – Mains Protection

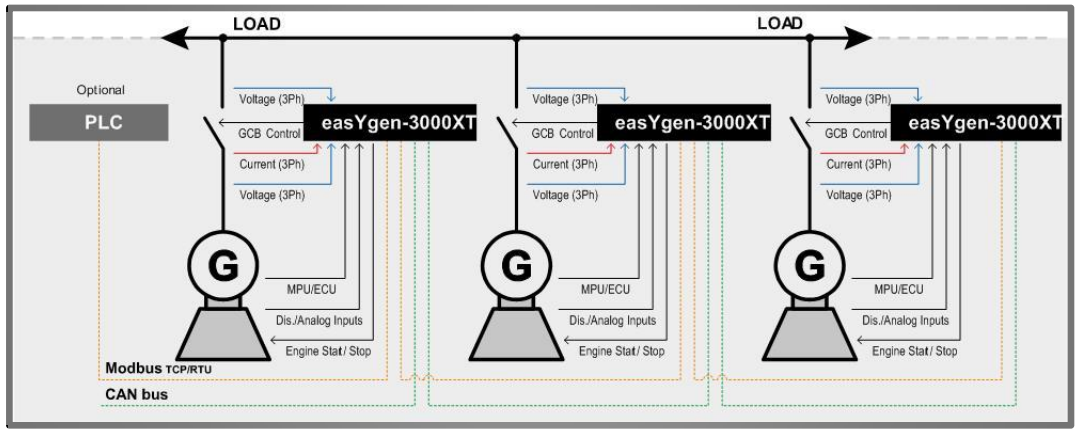
Protection	#of trip levels	ANSI #
Over-voltage	2	59
Under-voltage	2	27
Over-frequency	2	81O
Under-frequency	2	81U
Voltage asymmetry	1	47
Phase shift	1	78
df/dt (ROCOF)	1	81
Sync-Check	1	25
Time dependent voltage (FRT)	2	According to some EU countries MV guidelines
Mains voltage increase	1	According to German Low Voltage Directive VDE-AR-N 4105

easYgen-3200XT – Differentiation

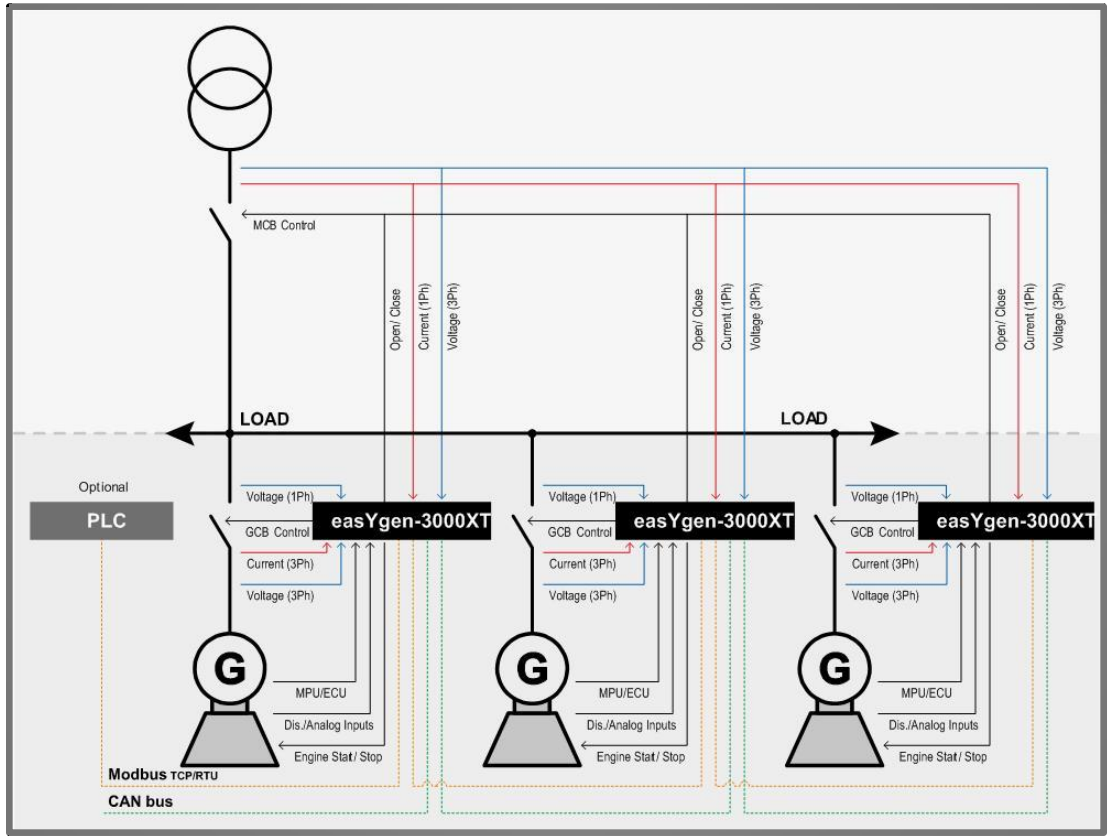


	easYgen-3100XT-P1	easYgen-3200XT-P1	easYgen-3200XT-P1-LT
Integrated Display	No	Color LCD	Color LCD
Operating Temperature	-20 to 70 °C	-20 to 70 °C	-40 to 70 °C
Freely Configurable PID Controllers	3	3	3
Cylinder Temperature Monitoring	Yes	Yes	Yes
External analog inputs / outputs	16/4	16/4	16/4
External discrete inputs / outputs	32/32	32/32	32/32

easYgen-3200XT – Application Examples

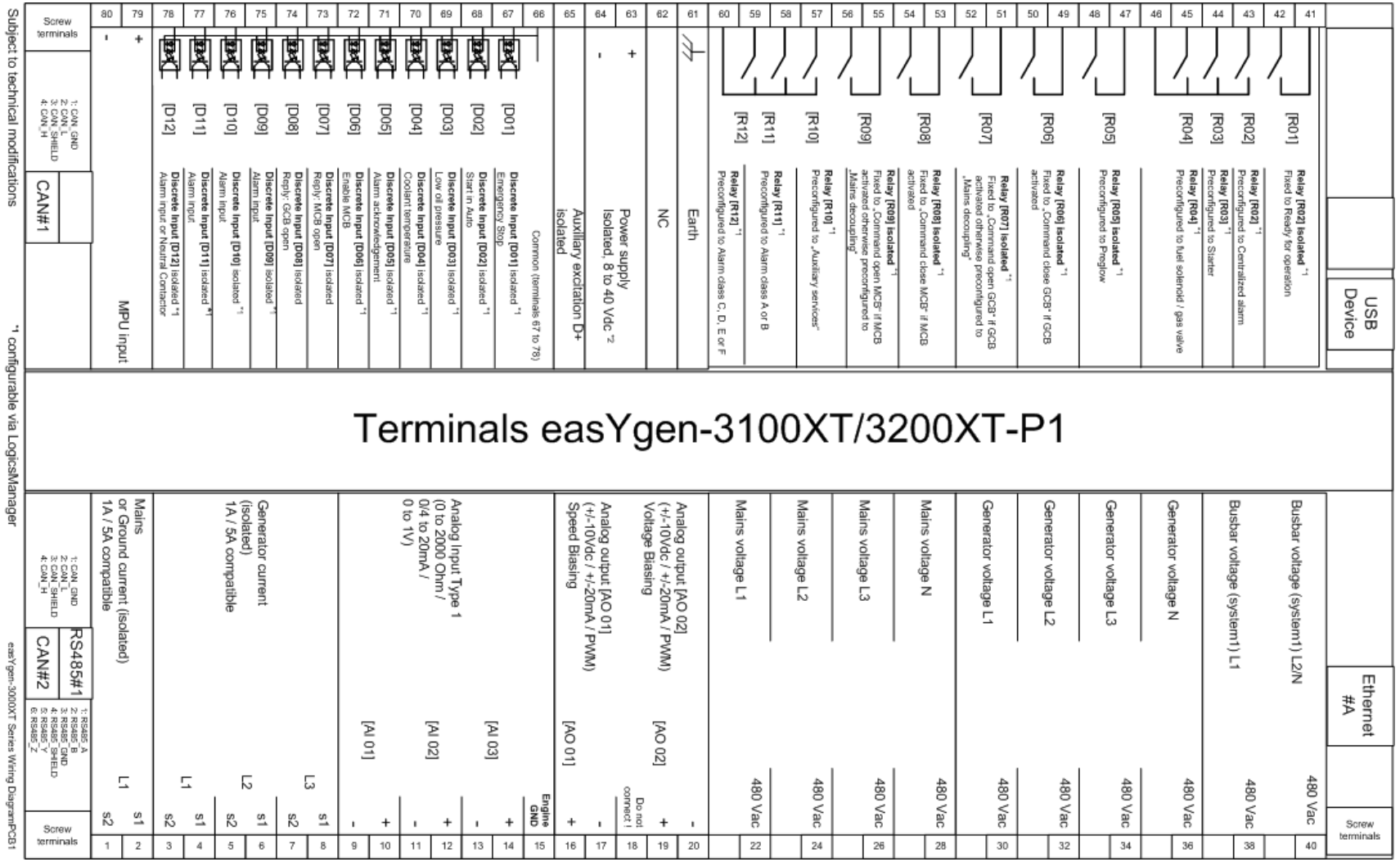


Multi Gen Island Parallel



Multi Gen Single Utility Parallel

easYgen-3200XT – Wiring Diagram



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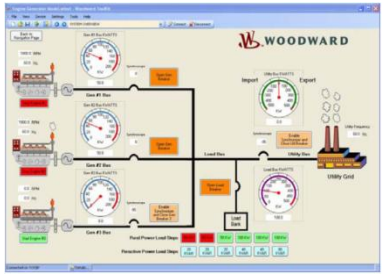
easYgen-3200XT – Accessories

- Remote Panel RP-3000XT

- Digital Expansion Card IKD1

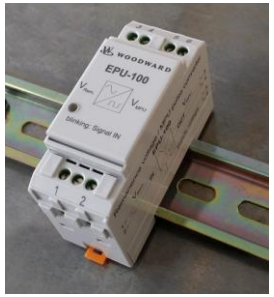
- ToolKit



easYgen-3200XT – Accessories

- Load Share Gateway -LSG

- EPU-100



- easYlite-100

easYgen-3200XT – Accessories

- **ProfiBus Gateway ESEPRO**

- **CAN-Fiber Optic Gateway**

- **Remote Access Gateway**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