

PRODUCT- INFORMATION

Universal
Diesel Controller
Series
NSB

6

1. Short Description

The Diesel control unit NSB built-in standard case 144 * 72 for front panel mounting will be used in generator sets and emergency-power set as complete controller to operate fully automatically. The Diesel control unit NSB comprises an internal PLC which operates start and stop of the genset by supervising all necessary digital and analogue inputs. Therefore the inputs and outputs are driven by its internal program. The necessary operation modes and alarms are displayed via LEDs on the front panel. Additional remote start and remote stop functions are implemented. Optional synchronising function, analogue outputs are available.

3 operation modes are available:

- **Short-time parallel operation**
- **Continuous parallel operation**
- **Stand alone / pump operation**

Following is available

- 12 operation and disturbance LEDs
- up to 8 alarms on front panel
- 2 free disposable digital inputs
- 2-3 free 0-20mA inputs
- 4 push buttons for control

Options:

- Modem operation for service and Test purposes, as well as remote control
- Operation hours
- kWh
- Number of Starts
- Auto-synchronising



2. Product-Specification

The Diesel control unit NSB comprises

- 16 digital inputs and 4 push buttons
- 8 (+8) Relay outputs
- 12 LED indicators
- 1 Net voltage supervision 3-phase
- 1 Generator voltage supervision 1-phase
- 1 Generator over frequency 1 phase
- 1 Battery voltage monitor 12V/24V

3. Area of Usage

The equipment can be used in

- diesel engine power supplies
- total energy plant
- large motor systems

4. Technical Data

Nominal voltage:	231V 50Hz(60Hz on request)
Nominal voltage net:	3 * 231V (other values on request)
Auxiliary supply:	12-35VDC
Modem Port:	RS232
Contact burden:	1A 250VAC, 5A 30VDC, 0.015Ω contact resistor
Burden:	2,5VA
Voltage insulation:	3kV (coil-contact), 1kV (open contact)
Operation time:	100%
Terminal:	wire up 2,5mm ²
Maintenance:	none
Temperature:	-20° C up to +50° C 85 % rel. humidity tropicalisation on request
Mounting position:	any
Mounting place:	front panel
Net isolation:	EN 60 742 (Security transformer)
Common regulations:	VDE 0435, T303; VDE 0843 T1-4; VDE 0160; IEC 255-4; BS 142
EMC:	EN 61 000 and EN V 50 140
CE:	yes
Case Material:	according UL 94
Size:	144mm * 72mm * 125mm (W*H*D)
Protection degree:	Case IP54 (IP65 with seal), terminal IP20 according VDE 106T100 / VBG 4
Weight:	ca. 0,8kg

5. Remarks

All products will be tested before delivery for 48 hours. This will guarantee our high quality standard.

All products can be adjusted by yourself on site. This gives you a maximum of flexibility and independence.

We guarantee that all our products are designed, manufactured and tested according the standard of VDE, DIN, CE etc.

6. Types

Type	Description
NSB-1	NSA with display for generator
NSB-2	NSA with display for generator and net

7. Options

There is a large variety of possible options as other input values, auxiliary supplies etc.. Please contact us for our support.

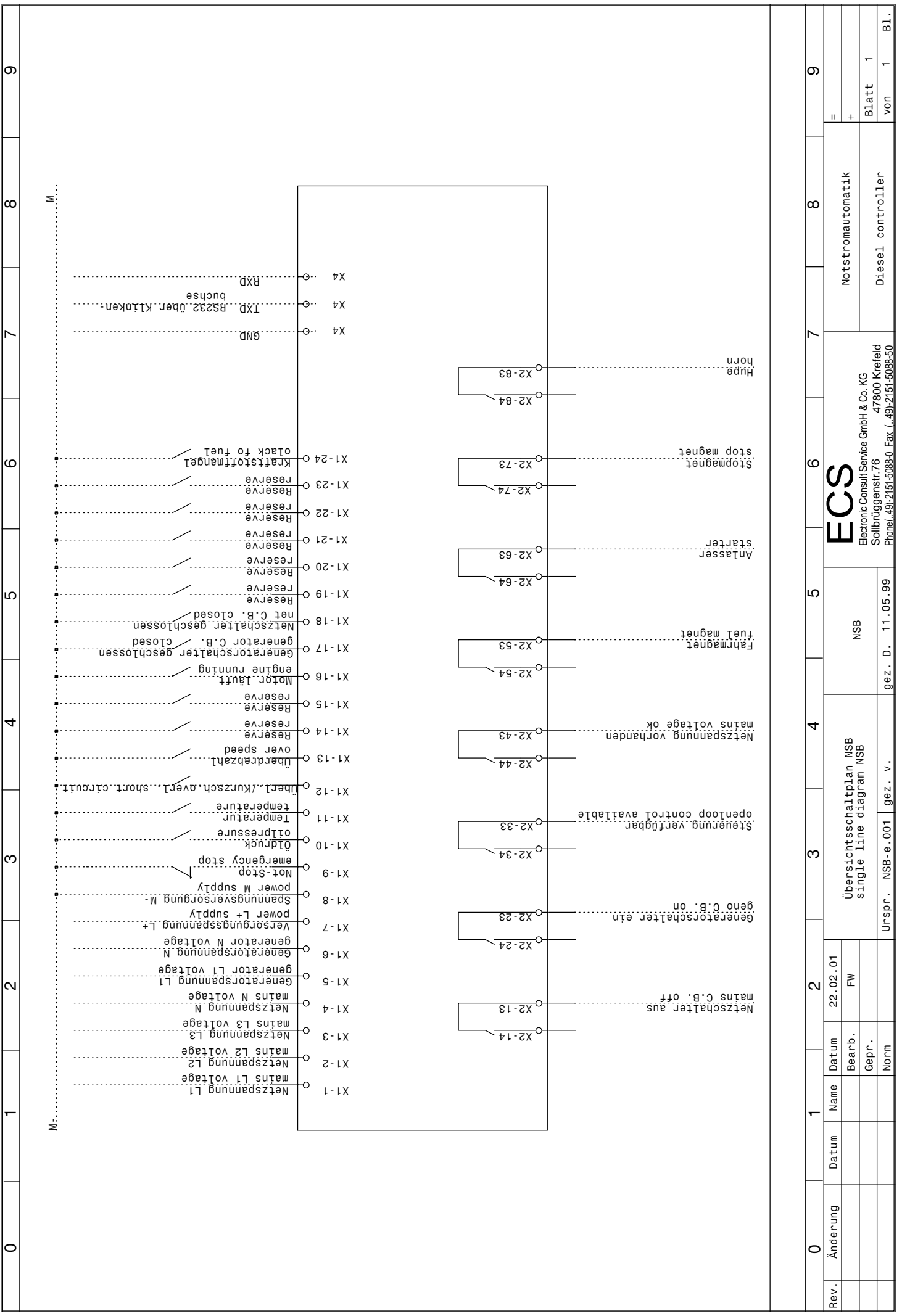
8. Ordering data

In chapter 6 you find our basic types.

1. Please select unit.
2. Ready

Please do not hesitate to contact us directly we would be pleased to support you.

Electronic Consult Service
GmbH & Co.KG
Sollbrüggenstraße 76
47800 Krefeld
Phone: (..49)-2151-5088-0
Fax: (..49)-2151-5088-50
Internet: www.eservice.de



0	1	2	3	4	5	6	7	8	9
Rev.	Änderung	Datum	Name	Datum	22.02.01	Übersichtsschaltplan NSB single line diagram NSB		NSB	
			Bearb.					Electronic Consult Service GmbH & Co. KG	
			Gepr.					Sollbrüggensstr. 76 47800 Krefeld	
			Norm					Blatt 1	
								von 1	
								Bl. 1	
								Diesel controller	
								Notstromautomatik	
								ECS	
								Electronic Consult Service GmbH & Co. KG	
								Sollbrüggensstr. 76 47800 Krefeld	
								Phone (+49) 2151-5088-0 Fax (+49) 2151-5088-50	
								gez. D. 11.05.99	
								UrSpr. NSB-e.001	
								gez. v.	