

SIEMENS

**MM7000
MUX/DMX
Satellite Control Unit**

**Application, Function, Design
Function Block Diagram
Modules**

Fire & Security Products

Siemens Building Technologies

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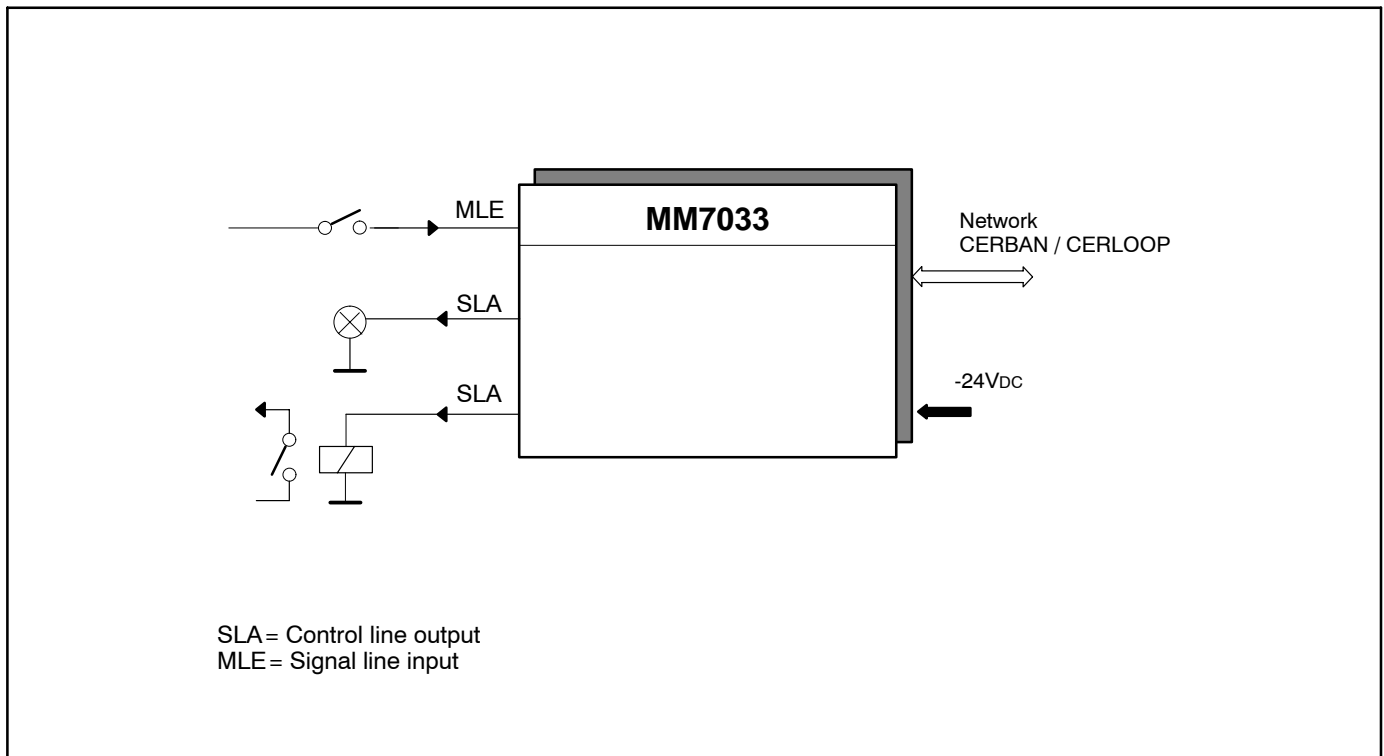
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Application

- The MUX/DMX satellite control unit **MM7033** is used at data acquisition level and carries out the following tasks:
 - Monitoring of technical installations
 - Control of fire protection installations
 - Positions of dampers
 - Fire doors
 - Smoke vents
 - Water level monitoring
 - Status of sprinkler systems (pumps and valves)
 - Signals can be logically linked.
- Interface for the reception and processing of signals from non-Cerberus control units.
- The inputs and outputs can be configured as sector fire, extinguishing, gas, intrusion or building services.

Function

- The MM7033 control unit receives the monitoring signals via digital inputs (contacts) and transmits the control signals via digital outputs (relay and/or LED driver).
- The MM7033 control unit transmits and receives the information via the DMS7000 network CERBAN or CERLOOP.
- Stores the process configuration and the system data.
- Monitors all interfaces and functions.
- The MM7033 control unit is microprocessor-controlled and has its own monitored power supply.
- Other PLC functions specifically for safety and security systems are available in addition to logic and time elements.

Design

- The MM7033 control unit consists of various modules in single and double Europe format mounted in pre-wired 19" racks.
- The unit can be extended in stages up to 48 inputs and/or outputs and is limited to 12 modules.
- The outputs and inputs are galvanically separated by optocouplers.
- Rack, power supply and connections can be accommodated in a 19" cabinet.
- Connection to non-Cerberus installations is via terminal blocks or pluggable cable.

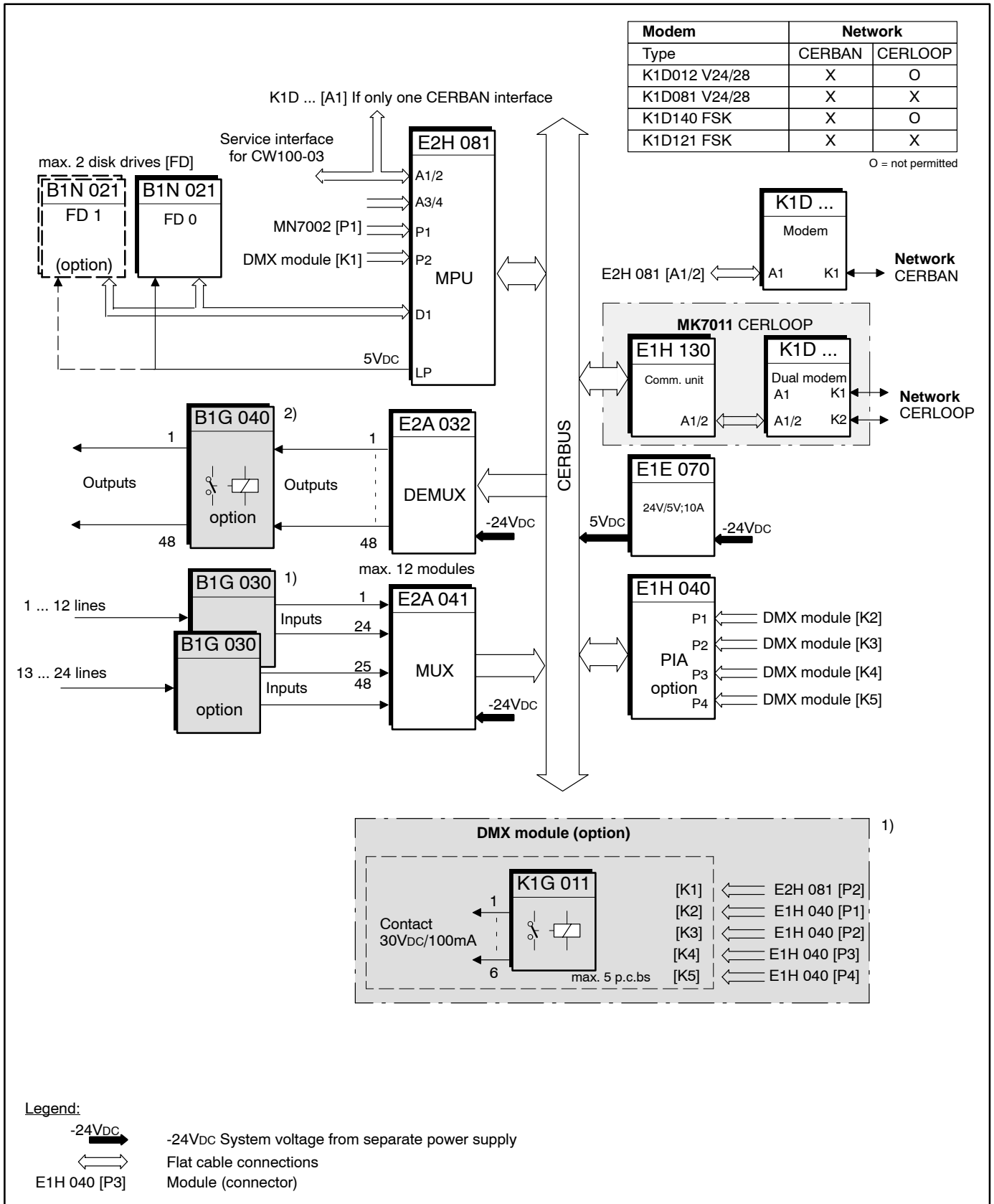
Power supply	<ul style="list-style-type: none"> - Operating voltage - Current consumption 	<ul style="list-style-type: none"> -24VDC approx. 1.6A
Input / Output (E2A 041 / E2A 032)	<ul style="list-style-type: none"> - Sum of inputs/outputs - Inputs or outputs per module - Galvanic separation - Operating mode in quiescent condition - Control line output (SLA) <ul style="list-style-type: none"> - Open collector output - Operating current - Output in operating condition - Signal line input (MLE) <ul style="list-style-type: none"> - Input voltage U_e - Input current I_e - Input in operating condition <ul style="list-style-type: none"> - pulse duration - Freely configurable with PLC functions 	<ul style="list-style-type: none"> max. 576 48 optocoupler inactive or active 1) max. 40mA continuous/interval 1:1 -5 ... -29VDC min. 1mA static/dynamic min. 150ms
Option – Output (E1H 040 / K1G 011)	<ul style="list-style-type: none"> - DMX module - 24 control outputs, contact loading <ul style="list-style-type: none"> - 6 potential free control outputs per module - freely configurable with PLC functions - Relay adapter with 48 relays, contact loading - Line monitoring 	<ul style="list-style-type: none"> max. 30VDC/100mA max. 30VDC/100mA per output max. line resistance 520Ω
PLC functions	<ul style="list-style-type: none"> - Load factors 	<ul style="list-style-type: none"> max. 20'000 elements
Communication	<ul style="list-style-type: none"> - Transmission speed <ul style="list-style-type: none"> - Network CERBAN - Network CERLOOP - Transmission distance <ul style="list-style-type: none"> - V24/V28 (CERBAN, CERLOOP) - FSK/PSK (CERBAN, CERLOOP) - End interfaces <ul style="list-style-type: none"> - CERBAN (CGE01) 	<ul style="list-style-type: none"> 300 / 600 Baud 1200 / 2400 Baud max. 1km, 4 wire max. 10km, 2 wire max. 1
Mechanical design	<ul style="list-style-type: none"> - Enclosure HU42 ALS2000 (standard version) or H98G 600 - EMC shielded enclosure 42HE - Module chassis - Modules - DIN 40050 protection category for cabinets 	<ul style="list-style-type: none"> 19" construction 19" construction 19" construction Single and double Europe format min. IP20
Ambient conditions (DIN 40040)	<ul style="list-style-type: none"> - Operating temperature - Storage temperature - Humidity <ul style="list-style-type: none"> - Annual mean - Maximum 	<ul style="list-style-type: none"> 0 ... +30°C -40 ... +60°C 75% rel. 95% rel. no condensation

1) Active: note current consumption

2) No longer available

3) CE conformity for industrial environment (EN 61000-6-4, EN 50130-4, EN 60950-1)

4) CE conformity for residential, commercial or light-industrial environment (EN 61000-6-3, EN 50130-4, EN 60950-1)



1) No longer available. B16040 can be replaced by GFR006 (275893), GFR008 (319720) or GFR011 (399630) type relay cards. Relay cards must be used for CE conformity of MM7033 (Immunity of inputs and outputs).

Type	Part No.	Designation	Nbr.	Application
Base equipment				
R1P 061	496 711	Power supply rack	1	
F14A 410	316 273	Flat cable 1m	1	Monitoring power supply
R2M 030	362 395	Universal rack	1	
G1S 510	306 283	Cable compartment	1	
E1E 070	444 543	DC/DC converter module 24V/5V,10A	1	
E2H 081	449 933	MPU module	1	
Z3G 090	452 108	Accessory set for disk drive 3.5"	1	for max. 2 disk drives
B1N 021	452 881	Disk drive 3,5"	1 ... 2	
-	412 915	Disk 3.5" type MF2-HD	1 ... 2	max. 1.4 MB
F14E 320	451 439	Flat cable 0.5m with 3 plugs	1	
-	505 013	DRAM 1M x 4Bit for E2H 081	(4)	equipped at factory
-	450 087	EPROM 64K x 16Bit for E2H 081	(1)	equipped with blank EPROM at factory
-	496232	CE Type label MF7033 / MM7033	1	CE type label
Network CERLOOP MK7011 or network CERBAN				
E1H 130	451 620	Communication module	1	CERLOOP MK7011
-	390 477	EPROM 32K x 8Bit for E1H 130	1	
K1D 081	463 773	Dual modem p.c.b. V24/28	1	CERLOOP 1)
K1D 121	470 601	Dual modem p.c.b. FSK/PSK	1	CERLOOP 1)
-	463 498	Relay for K1D 081 / K1D 121	4 / 2	per modem p.c.b.
F14A 230	402 967	Flat cable 0.25m	2	
K1D 012	463 760	Modem p.c.b. V24/28	1	CERBAN 1)
K1D 140	470 614	Modem p.c.b. FSK	1	CERBAN 1)
M3P 030	378 774	Modem filter modul	1	per interface with modem V28
Outputs/Inputs				
E2A 032	427 162	Demultiplexer module	1	per 48 outputs
E2A 041	370 808	Multiplexer module	1	per 48 inputs
V52C 010	362 379	Connecting cable	1	per module
Output option (DMX module) 2)				
K1G 011	505 437	Relay p.c.b.	1	per 6 outputs
E1H 040	306 652	PIA module	1	from 2 nd relay p.c.b.
R1L 040	433 648	Assembly bracket	1	from 2 nd relay p.c.b.
F14A 320	319 652	Flat cable 0.5m	1	per p.c.b.
Option 2)				
B1G 040	443 515	Relay adapter	1	per DMX module E2A 032
B1G 030	355 315	Line monitoring	1	per 12 lines (= 24 MUX inputs)

1) Modules selected according to application

2) No longer available. B1G040 can be replaced by GFR006 (275893), GFR008 (319720) or GFR011 (399630) type relay cards. Relay cards must be used for CE conformity of MM7033 (Immunity of inputs and outputs).

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