SmartWire-DT™

Solutions from Lean Connectivity to Lean Automation

Cost Optimization Clever Communication



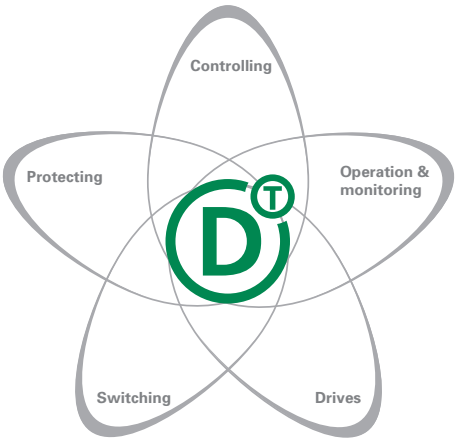


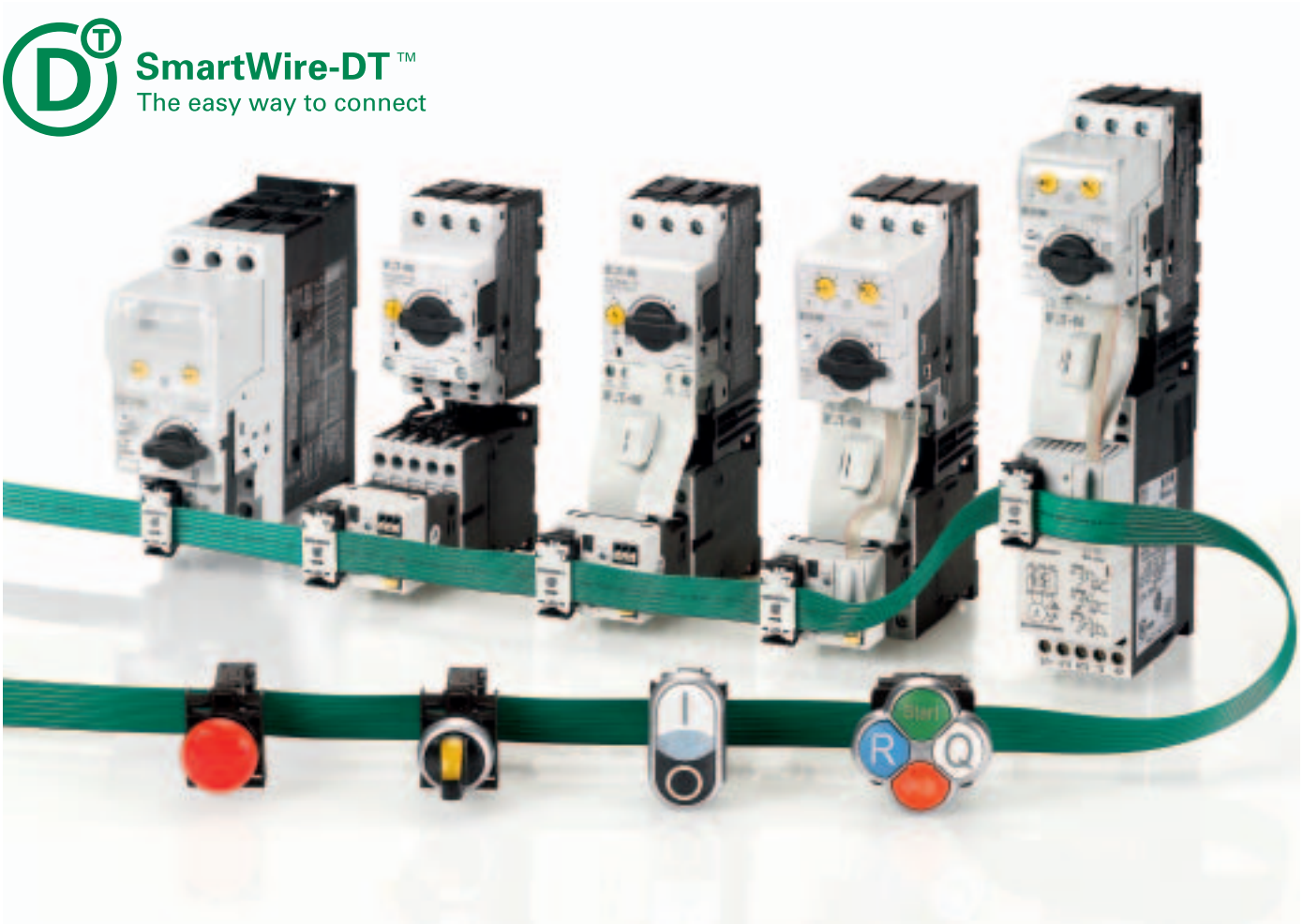
EATON

Powering Business Worldwide

SmartWire-DT™.
From Lean Connectivity to Lean Automation.

Lean Connectivity and Lean Automation involve the use of lean methodology on engineering and automation processes. Complex wiring becomes unnecessary, remote intelligence is created, entire device levels are eliminated, including of course the associated procurement and maintenance costs. With SmartWire-DT, Eaton has initiated a new age in the connectivity between the individual switch cabinet components. SmartWire-DT replaces the control wiring in all components right down to the sensor, and enables direct and continuous communication between the central controller and the controlled sections of the plant.



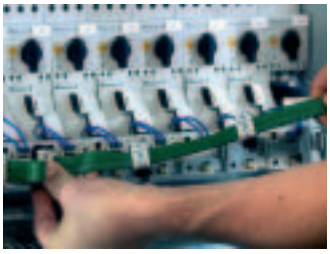


SmartWire-DT the basis for Lean Connectivity

SmartWire-DT reduces the wiring effort and expense with many switchgear systems up to 85% and helps along the entire value-added chain – from the design to the construction, to the commissioning up to system expansion – in the reduction of costs. SmartWire-DT relies on the tried-and-tested Eaton industrial switchgear and grants intelligent communication features.



Reduced engineering costs, by up to 70%



Fault-free mounting and wiring



Open for every master with different gateways

Eaton offers a wide range of different gateways to standard fieldbuses for exchanging data with the higher-level control. This enables the connection of SmartWire-DT to the control systems of many manufacturers.



Easy800 with SmartWire-DT – twice as simple

The new easy800 with SmartWire-DT combines the functions of an easy800 with the direct connection to the communication system SmartWire-DT. Instead of connecting the inputs and outputs individually to the control, they are simply connected via the SmartWire-DT line to the new EASY802-SWD and EASY806-SWD. Programming is implemented in the usual way in a ladder diagram using easySoft-Pro. The new easy800 with SmartWire-DT combines the simplicity of two systems and thus offers double the advantages in the area of control panel design.



HMI/PLC with Smartwire-DT – the basis for Lean Automation Solutions

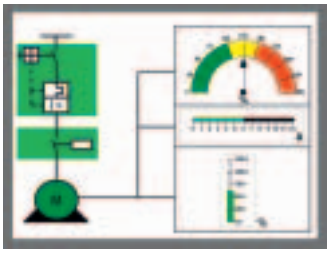
However, Eaton does not just stop at Lean Connectivity: The HMI-PLC combines the most advanced IT technologies with the conventional PLC and HMI technology. Control, visualization and data management tasks are combined with state-of-the-art communication in a single device – the HMI-PLC.
The touch display PLCs XV100 series is now offering Lean Automation Solutions. These are simple and straightforward concepts with fewer components, pluggable SmartWire-DT connections and direct communication up to the sensor.



Reduced time required for wiring, testing and commissioning by up to 85%



Comfortable and intuitive operation with minimum downtimes



Maintenance with direct diagnostics



Simple to expand with reserved slots

SmartWire-DT™.
Interconnect 99 devices over 600 m.

One system, countless possibilities: Independently of the selected bus system of the higher-level control, up to 99 devices can be interconnected with the new SmartWire-DT line up to a maximum overall total length of 600 m. The “green” cable interconnects the devices inside and outside the control panel.

1. SmartWire-DT gateways
2. SUB-D data plug, 9-pole
3. SmartWire-DT HMI-PLC
4. Control relay easy800 with SmartWire-DT
5. SmartWire-DT blade terminal, 8-pole
6. SmartWire-DT ribbon cable, 8-pole
7. SmartWire-DT device plug, 8-pole
8. SmartWire-DT input/output modules
9. SmartWire-DT interface for NZM
10. NZM circuit-breaker
11. SmartWire-DT contactor module
12. DILM contactors
13. SmartWire-DT contactor module with Manual-0-Automatic switch

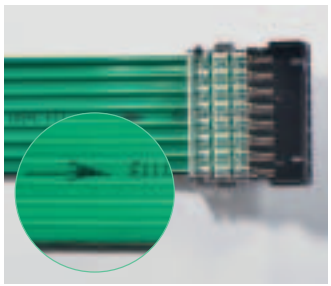


Addressing of the SmartWire-DT devices is undertaken automatically at the push of a button in the sequence in which they are mounted.

The cable

The “green” eight-pole flat or round cables are the lifeline of the SmartWire-DT and interconnect all SmartWire-DT devices. In addition to the data lines, the supply voltages for the devices (15 V DC) and the control (24 V DC) of the contactors are included in the cable.

The flat cable has two prominent distinguishing features: Arrows indicate the direction of the cable and the black marking indicates the mounting orientation of the devices and the flat connector.

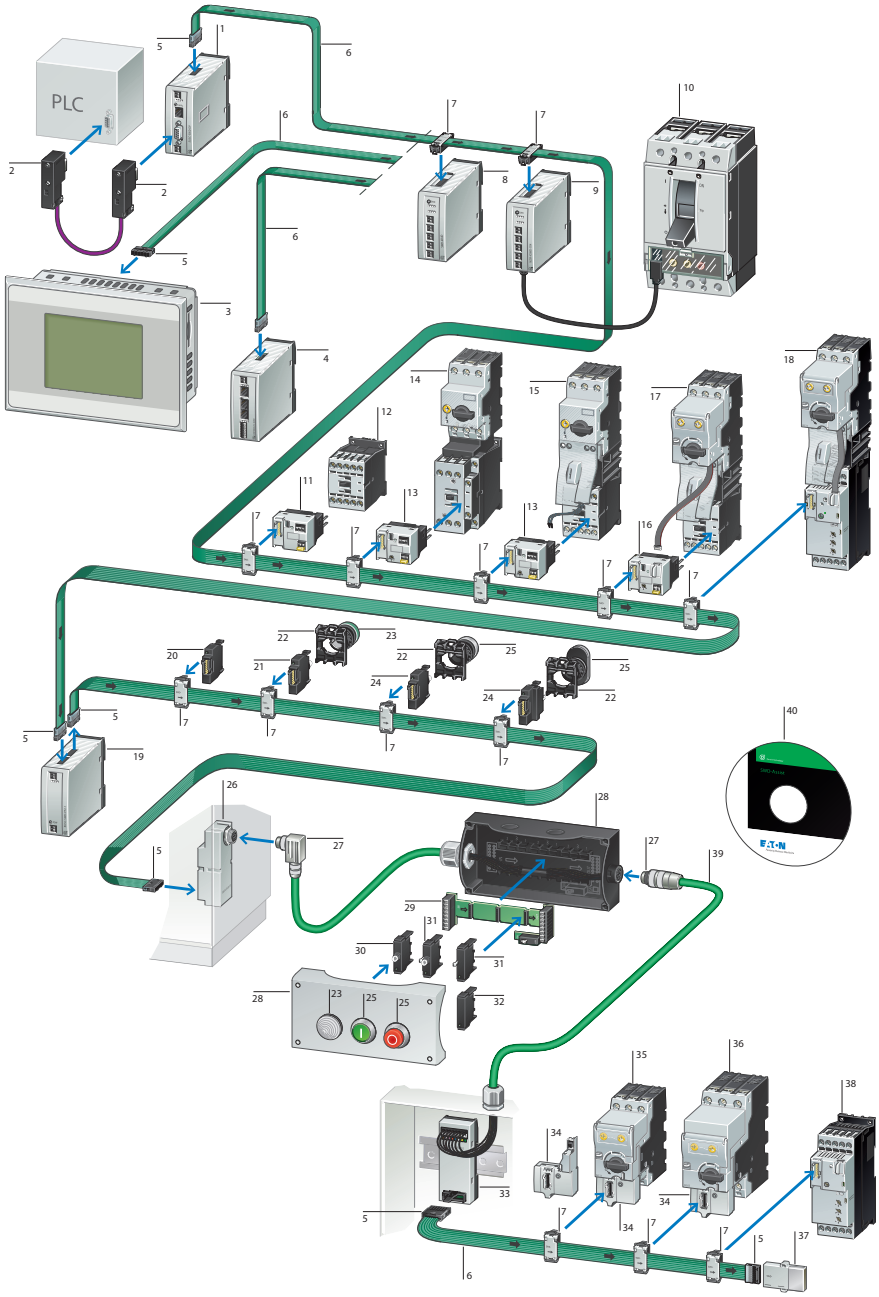


▲ **The flat cable**
The "green" eight-pole flat cable is the lifeline of the SmartWire-DT and interconnects all devices.

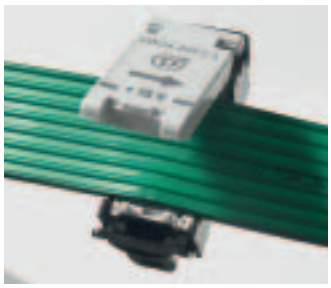


▲ **The flat connector**
The flat connection serves as the connection of the flat cable to the gateway and the bus termination, or to the respective coupling module. Mounting is safe and simple with the crimping tool – place the flat plug in the crimping tool, put the flat cable into the plug, squeeze the clamping tool – ready.



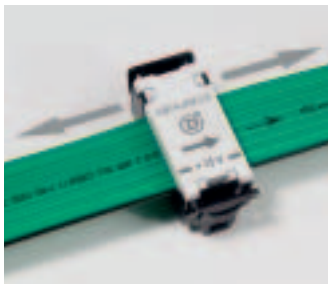


14. Motor-protective circuit-breaker
15. MSC motor starter
16. SmartWire-DT, PKE module (motor starter)
17. Motor starter with PKE electronic motor protection
18. DS7 soft starter with PKE electronic motor protection
19. SmartWire-DT power feed module
20. SmartWire-DT universal slave, front fixing
21. SmartWire-DT LED element, front fixing
22. RMQ-Titan fixing adapter for front mounting
23. RMQ-Titan indicator lights
24. SmartWire-DT function element for front fixing
25. SmartWire-DT operating elements
26. SmartWire-DT control panel entry, ribbon to round cable
27. SmartWire-DT plug connector
28. RMQ-Titan surface mounting enclosure
29. SmartWire-DT card for function elements, base fixing
30. SmartWire-DT LED element for base fixing
31. SmartWire-DT function element for base fixing
32. SmartWire-DT universal slave, base fixing
33. SmartWire-DT adapter ribbon/round cable for rail mounting
34. SmartWire-DT PKE module (motor-protective circuit-breaker)
35. PKZ12, PKZ32 motor-protective circuit-breaker
36. PKZ65 motor-protective circuitbreaker
37. SmartWire-DT network termination for 8-pole ribbon cable
38. DS7 soft starter
39. SmartWire-DT round cable, 8-pole
40. SmartWire-DT planning and ordering tool, SWD-Assist



▲

1. Step: mount the device plug
Place the eight pole flat cable in the device plug and snap shut, ...



▲

2. Step: position the device plug
... then position the device plug as required and fix it by applying light pressure ...



▲

3. Step: establish device connector contact
... establish the device plug and flat cable contact using the plug crimping tool.



▲

The bus termination
The bus termination is at the end of every SmartWire-DT line. Either in the control panel of as a switch-in bus termination in the M22-.. surface mount enclosures.

SmartWire-DT™. Simply ingenious.

Conventional wiring of control circuit devices involves a lot of effort and expense – every contact or indicator light is wired individually, and separately connected to the input/output modules of the control. This requires a lot of time and has the potential for many wiring faults. SmartWire-DT is simply ingenious – the flat green cable connects control circuit devices with just a click. This saves time and reduces the sources of error.

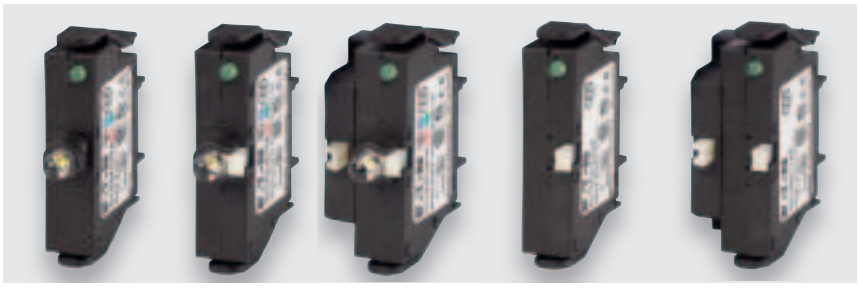




SmartWire-DT – simply ingenious – for control circuit devices.

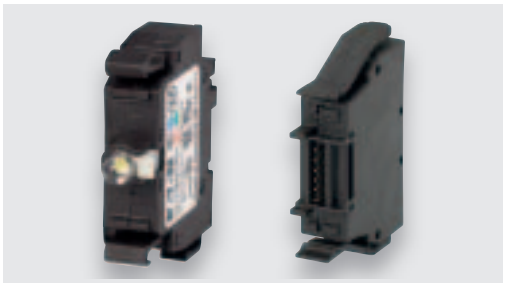
RMQ-Titan installation

RMQ Titan control circuit devices are plugged together with SmartWire-DT function elements.
Simply insert the device plug, ready to go.



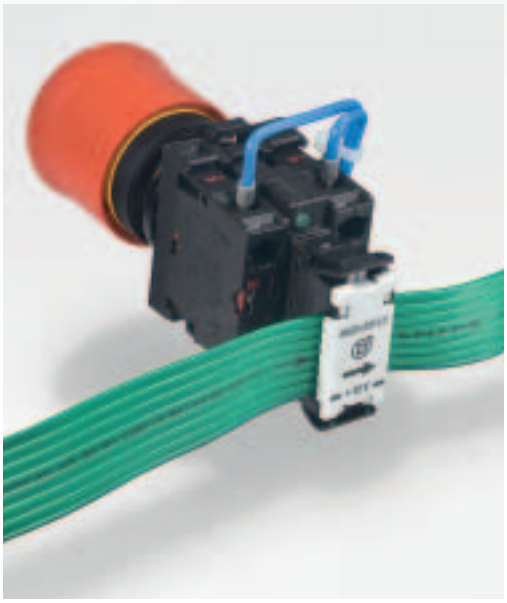
Function elements for base fixing
The function elements differ in their properties according to the actuation devices that are used (pushbuttons, selector switches, indicator lights, etc.) and are available in the following versions:

- Function element LED
- Function element LED with 2 positions
- Function element LED with 3 positions
- Function element with 3 positions
- Function element with 2 positions



Front fixing
The variant shown on the left is also available for front fixing. Shown here: the front and rear view of a function element with 2 positions.

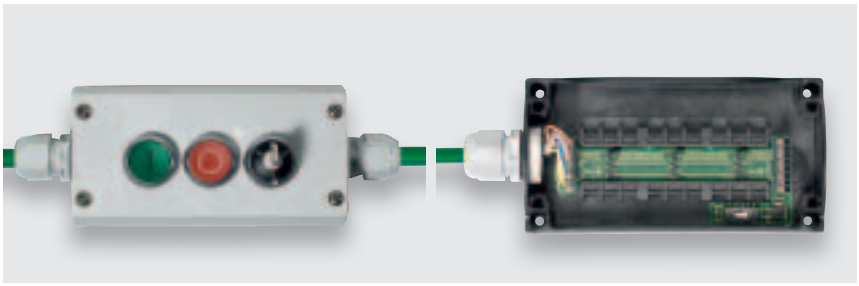




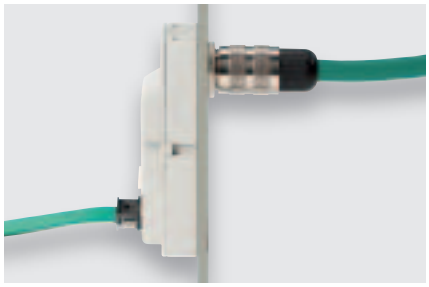
Every SmartWire-DT function element has its own address as well as self diagnostics.
The benefits: fast and efficient diagnostics.

EMERGENCY-STOP device

The 2-position function elements are designed to ensure that a standard contact element can be used to the right and left of the SmartWire-DT function element. For the EMERGENCY-STOP device this has the benefit that the EMERGENCY-STOP circuit can be wired separately and can feature a twochannel design. On other control circuit devices the load can be switched in the accustomed way.



RMQ Titan surface mount enclosure with SmartWire-DT
The green SmartWire-DT round conductor connects the control panel with the peripherals. The M22-.. surface mount enclosures are connected with cable glands or plug connectors (optional accessories). The circuit board is simply connected using colour coded push-in terminals. Now simply snap on the required base fixing function element – ready to go.



From the control panel into the peripherals
The control panel feed-through interconnects the flat cable with the round cable. For the connection outside the control panel the SmartWire-DT round cable with IP 67 degree of protection screw attachment is used.

SmartWire-DT™. Simply clever.

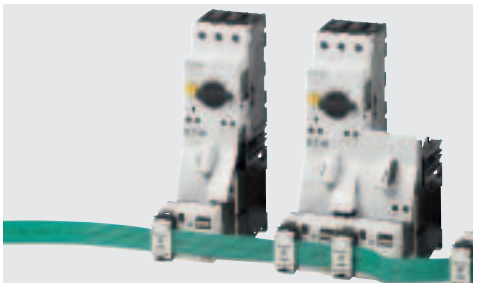
Even the conventional wiring of a control current circuit incorporating motor starters or contactors involves considerable time and effort.
Every motor starter or every contactor is wired individually, and separately connected to the input/output modules of the control. This requires a lot of time and has the potential for many wiring faults and operating faults. It is really clever with our motor starters and contactors of the xStart series complemented by SmartWire-DT.



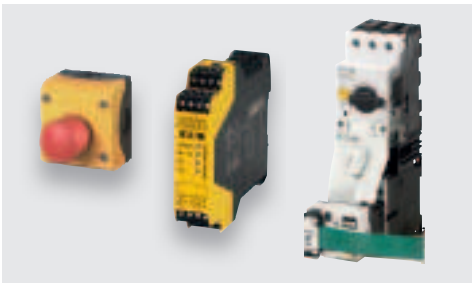
SmartWire-DT – simply clever – for motor starters or contactors

Motor starters from standard components

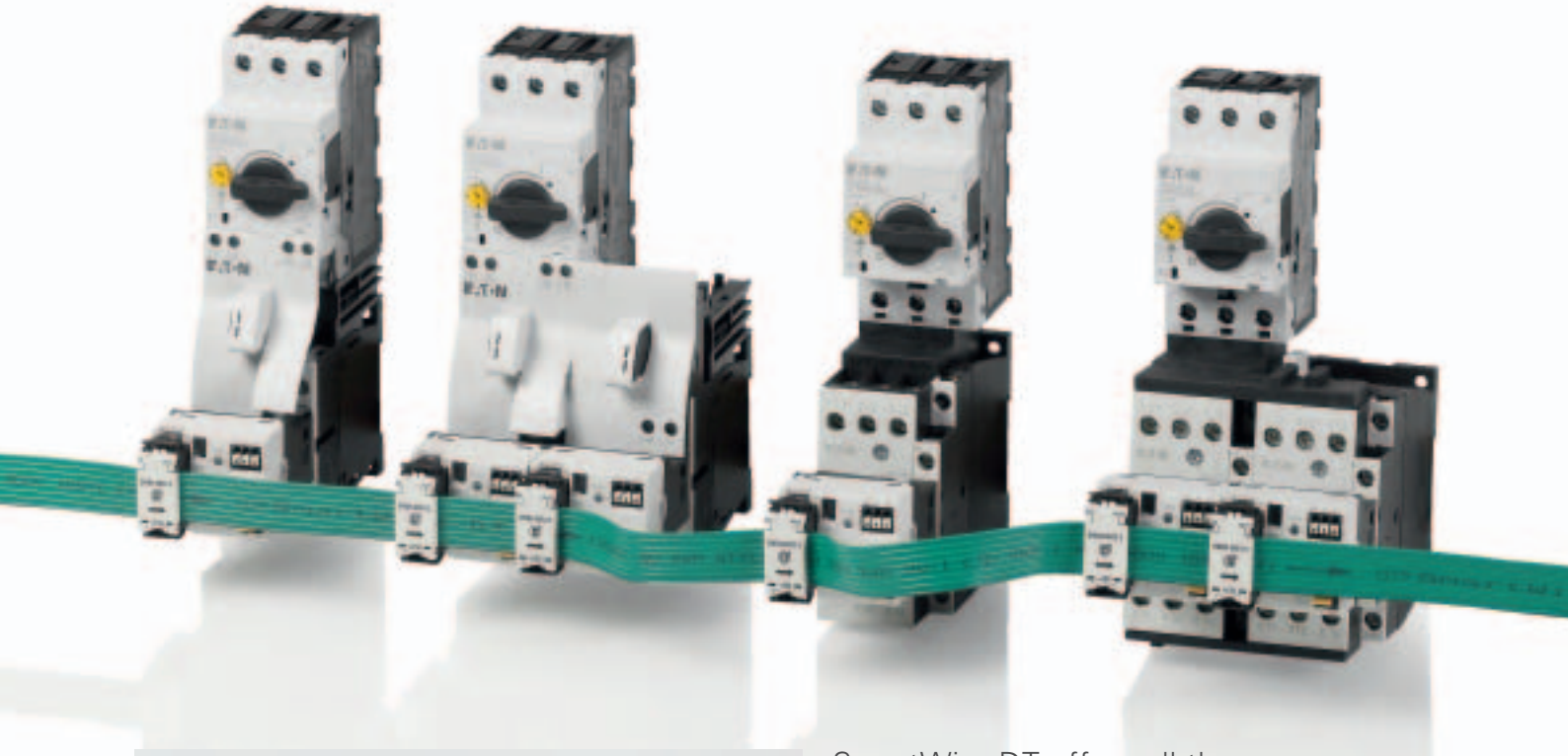
A good example for workload reduction:
The SmartWire-DT module for DILM is simply plugged on like an auxiliary contact on contactors up to 38 A. To confi gure a motor starter, the motor-protective circuit-breaker from the standard range is used. This combination can now be complemented by system accessories (e. g. the three-phase commoning link or busbar adapter.

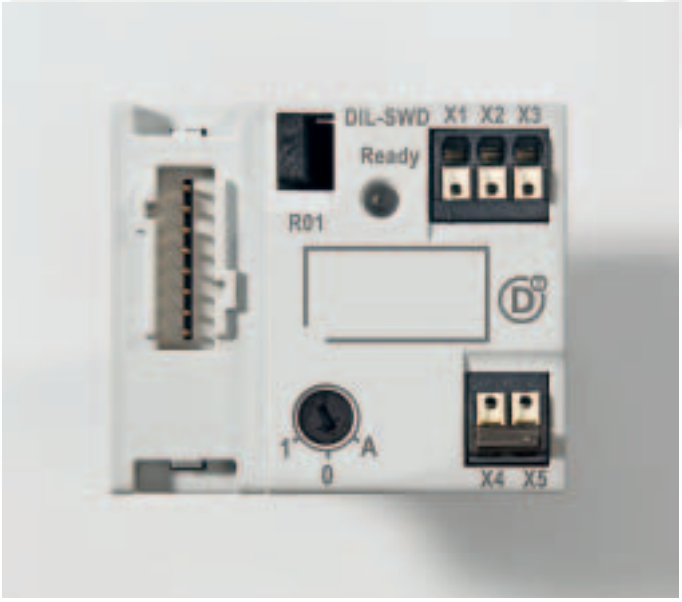


DOL and reversing starters
Simple plugging together of xStart DOL and reversing starters up to 15 kW: These are made up of standard components and complemented with space-saving SmartWire-DT function elements. The electrical and mechanical interlock of the contactor is still possible.



EMERGENCY-STOP
EMERGENCY-STOP shutdown at a central point: The 24 V DC control voltage for the contactors is supplied centrally on the gateway. Thus the power supply is integrated into an EMERGENCY-STOP circuit and leads to switch off of the contactors during an EMERGENCY-STOP.
Several EMERGENCY-STOP circuits can be established within a SmartWire-DT line. EMERGENCY-STOP circuits can be simply established by the use of powerfeed 1 or 2.

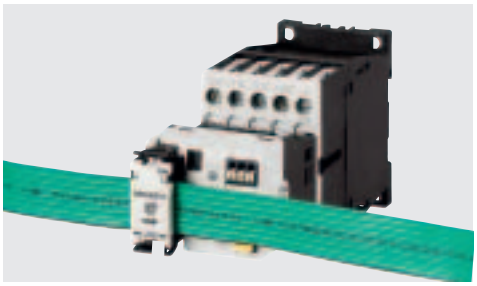




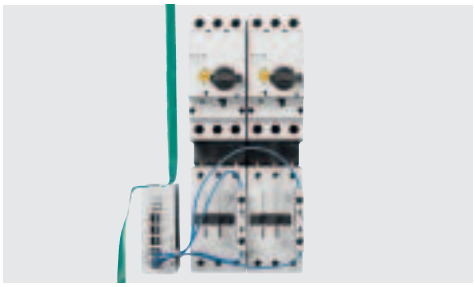
SmartWire-DT offers all the necessary information without complex wiring.

Comfortable operation and optimum information flow

Faster commissioning through simple testing: The xStart motor starter combination can be switched on and off directly on the SmartWire-DT function element DIL/MSC (manual/auto) using a screwdriver. In automatic mode, the contactor then receives its switching command from the PLC.
With SmartWire-DT it is possible to receive exact and precise status messages. Hereby a differentiation is made between trips due to a short circuit or an overload. Accordingly optimum system transparency is guaranteed.



Switch up to 2200 A with a coupling contactor
In addition to the size 1 and 2 contactors, the SmartWire-DT modules for DILM can also be combined with contactor relays of type DILA. This opens new possibilities for distributed control of loads with AC voltages, or the distributed control of the DILA as a coupling contactor for contactors up to 2200 A. The switching status of the controlled contactor is also determined via the two digital inputs of the SmartWire-DT module for DILM.



Control of AC voltage loads
AC controlled motor starter combinations are integrated into the SmartWire-DT system via the SmartWire-DT input/output modules using relay outputs. Using the digital inputs of the modules, the switch position of the contactor can be determined; with motorstarter combinations, the switch position of the motor-protective circuit-breaker can also be determined.

SmartWire-DT™. Simply communicative.



The electronic motor-protective circuit-breaker PKE enables simple integration into the world of automation with SmartWire-DT. In this way, all relevant information of the motor power distribution system can be transferred to the control. The integration can be for both the individual PKE motor-protective circuit-breaker as well as for the PKE motor starter combination.



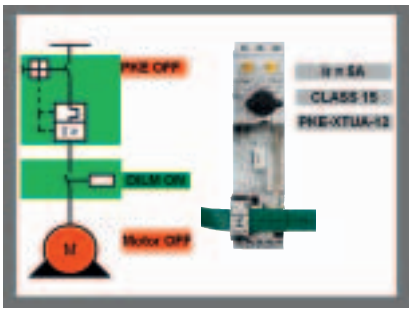
SmartWire-DT – simply communicative – for motor-protective circuit-breakers PKE

Networked motor-protective circuit-breaker PKE

Using the function element PKE-SWD, the motor-protective circuit-breaker PKE is integrated into the system SmartWire-DT. Using the function element, all relevant information concerning the motor-protective circuit-breaker can be read such as the switching state, tripping causes, actual motor current as well as thermal motor loading without the use of auxiliary switches or additional sensors. The function element can be combined with all PKE basis units PKE 12, PKE 32 and PKE 65 and thus offers a universal networking solution for the current range from 0.3A to 65A.

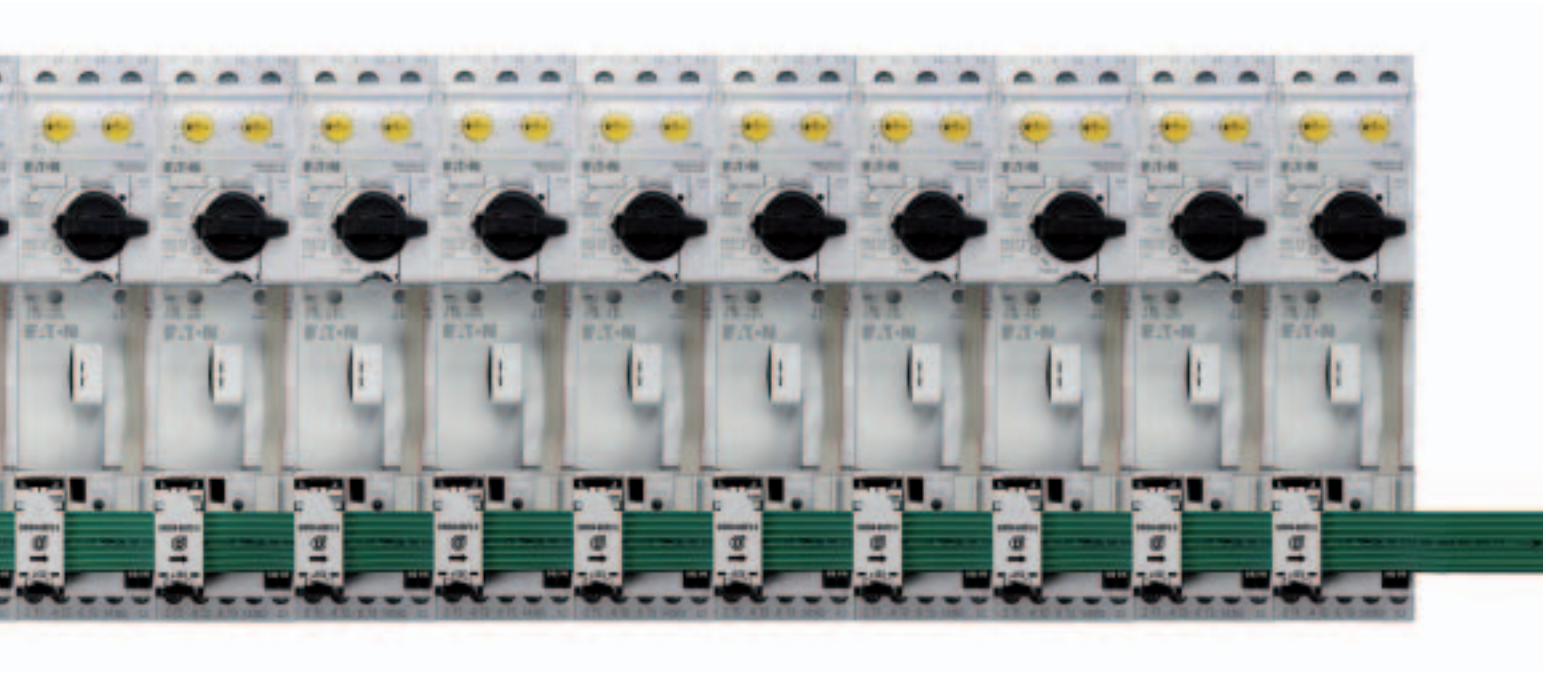
Everything at a glance

Through the integration of the the motor-protective circuit-breaker PKE to SmartWire-DT, all switching states and status messages, which were only accessible using additional equipment up to this point, are transferred to the control. This reduces the entire control current wiring of the motor feeder and provides enhanced transparency. The additional transfer of process data such as the actual motor current and thermal motor loading indicates potential process failures in advance. This improves the service-friendliness and availability of the system.



Status

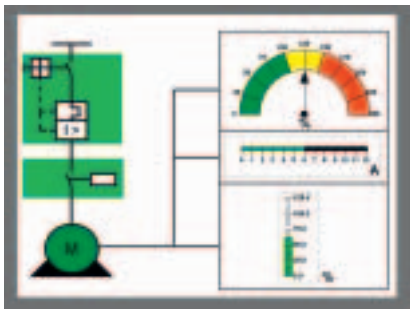
– Switch position PKE, contactor
– Set rated current
– Set time-lag class



Networked motor starter combination with PKE

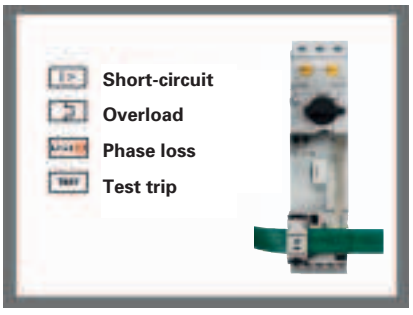
The function element PKE-SWD-32 enables the integration of PKE motor starter combinations up to 32 A into the system SmartWire-DT. The function element is inserted directly onto the contactor of the motor starter combination. The integrated interface to the contactor coil enables the control of the motor starter combination and reports its state. This eliminates the entire control circuit wiring of the motor starter. Through the additional integration of the function element to the PKE, the switching states and status messages of the motor-protective circuit-breaker are transferred to the control via SmartWire-DT. The adjustable overload relay functionality of the function element PKE-SWD-32 triggers an automatic switch off and switch on of the contactor in the event of an overload. Manual switching in of the motor-protective circuit-breaker is not required, as it remains switched on.





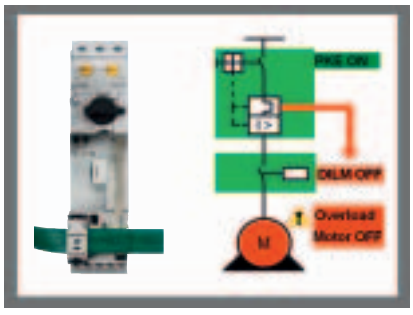
Current/capacity utilization

– Relative motor current value
– Thermal motor loading



Diagnostics

– Overcurrent (short-circuit), phase loss, overload, test



Additional functions

– Overload relay function (contactor is switched off at overload)
– Manual / automatic operation via rotary switch

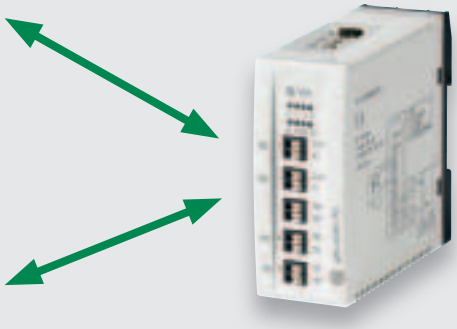
SmartWire-DT™. Simply efficient.

In addition to control circuit devices and motor starters, the SmartWire-DT can also communicate directly with compact circuit-breakers. The NZM module XSWD-704 is used for this purpose.. The SmartWire-DT communication system demonstrates its capabilities here. Control circuit devices with 1 bit data can be operated just as well as circuit-breakers with 32 byte data. Important circuit-breaker information is made available via SmartWire-DT. This is, for example, the phase currents or diagnostic data such as load warnings and diagnostic messages.
All NZM 2/3/4 with electronic releases can be connected directly to the SmartWire-DT via the NZM module. All currents up to 1600 A in the energy distribution system are thus under control of SmartWire-DT.



Load warnings


Remote switching





SmartWire-DT – high-performance communication for energy management

NZM communication

The detection and correction of faults before they occur is the objective of the preventative warning. NZM reports excessive current values in 3 warning stages via SmartWire-DT. SmartWire-DT also assumes the control of a remote operator for the circuit-breaker, so that the wiring that would otherwise be required can be eliminated.

Comprehensive range of data

Inputs

- Currents
- Status
- Diagnostics
- Energy meter
- Setting values
- Identification

All three phases and the switch position are available as input data. For diagnostic purposes, the load warnings, and in the case of a trip, information concerning the cause is sent. In addition to the active energy, the switch type and current trip setting parameters are provided.

Switch on and off via remote operator as well as a reset of the energy meter can be sent as commands to the switch.

Outputs

- Remote operation
- Reset
- Energy meter

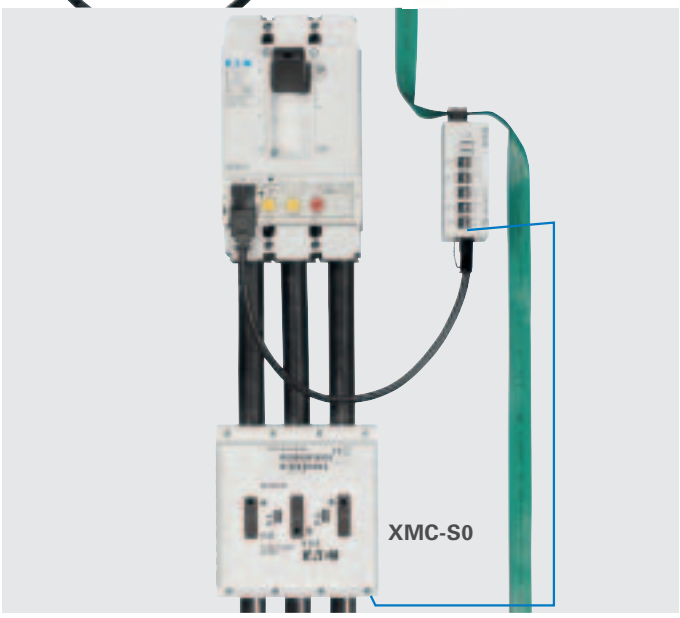






Energy meter on board

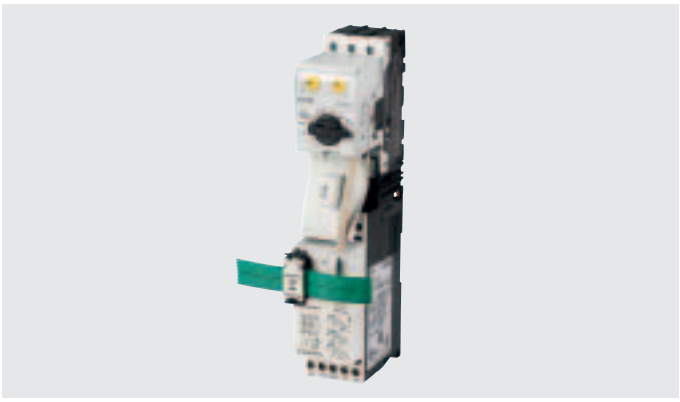
The NZM module transfers the value of consumed active energy in the respective input or output circuit. For this purpose, a non-volatile energy meter is on board the module and can be read at any time via SmartWire-DT. This provides the prerequisite for energy optimization.
The NZM function element has a further standardized S0 interface for energy measurement in addition to the NZM interface. The NZM-XMC-S0 module, which actually measures the energy, is connected to it. It incorporates the measurement transformer and the required measurement circuitry.



SmartWire-DT perspective



A SmartWire-DT connection is in preparation for the frequency inverter M-Max for simple and flexible data transfer.



The soft starter DS7 will soon be available with a SmartWire-DT connection to simplify wiring and enhance functionality.

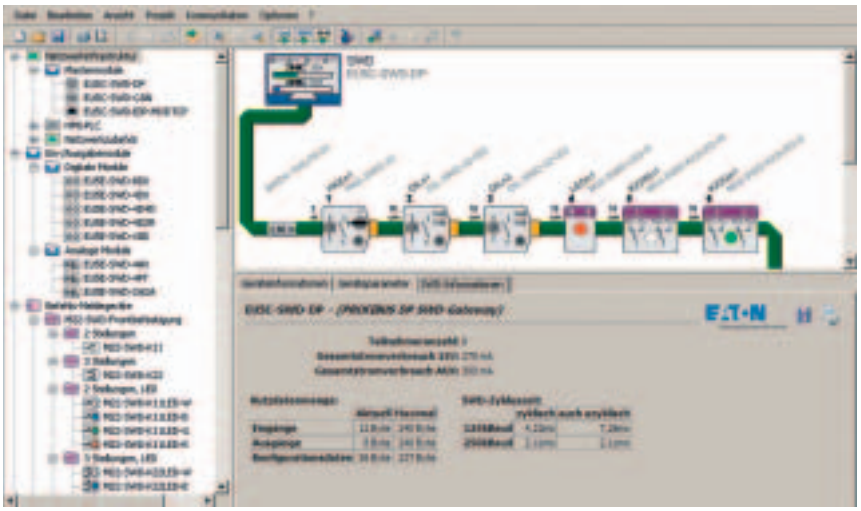
SmartWire-DT™.
Simple configuration and fast commissioning.

SmartWire-DT to a very great degree reduces the wiring effort and expense and helps along the entire value-added chain, from the design to the construction, the programming, to the commissioning and up to system expansion – in the reduction of costs.
SmartWire-DT based on the known and proven – that is on Eaton industrial switchgear – SmartWire-DT transforms Eaton industrial switchgear to communication – enabled devices.



Simple connection to the standard fieldbus

World-wide standardization of communication standards for industrial applications has also simplified the application of SmartWire-DT. In the application via fieldbus gateways, the SmartWire-DT can be connected to controls from any manufacturer. Hereby, standardized mechanisms for the configuration and parameterization of the SmartWire-DT device are used. Whether you are currently using a distributed I/O system, or whether you will soon be introducing the innovative communication system SmartWire-DT: Configuration and programming do not change for you.

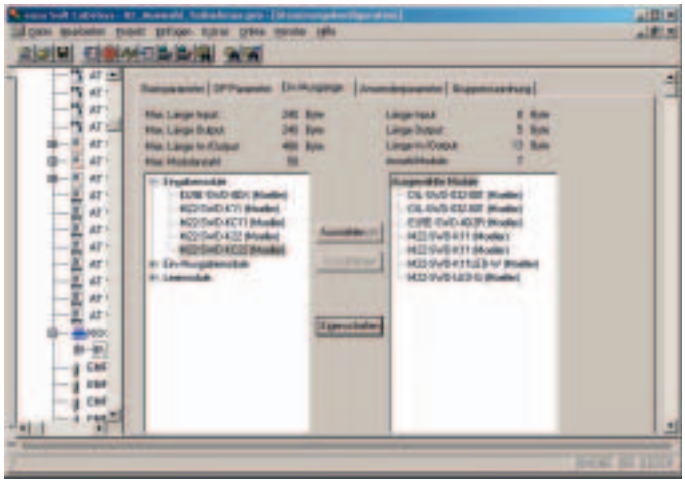


Easily achieve you target with SWD-Assist

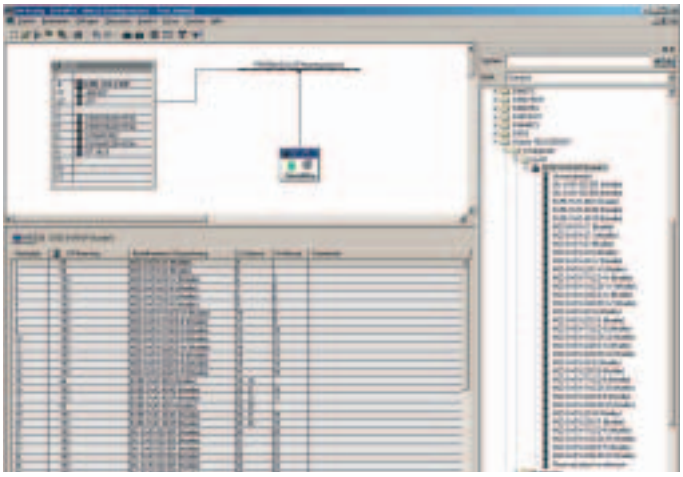
The SWD-Assist software supports you in the planning, engineering and commissioning of a SmartWire-DT network. You simply select the required SWD function elements from the device catalogue and place them at the intended location. The configuration can be saved and reused for other projects. A review of the network is just as possible as automatic inclusion of missing components. Various export options of the network configuration or even the input/output data also simplify the application within the programming systems of PLC manufacturers.



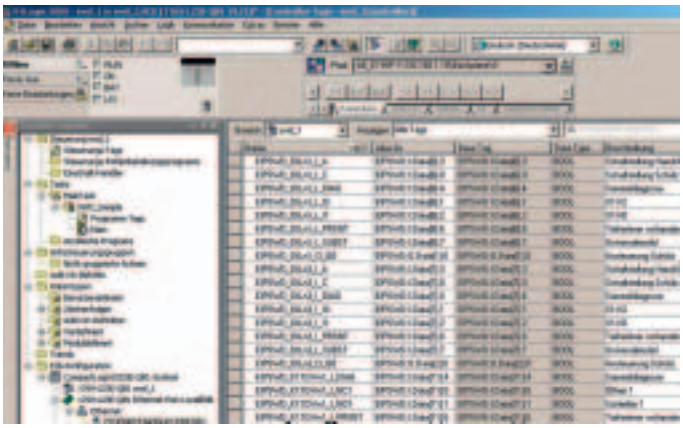
The SWD-Assist can be downloaded free-of-charge from our website:
http://downloadcenter.moeller.net/en/software.html



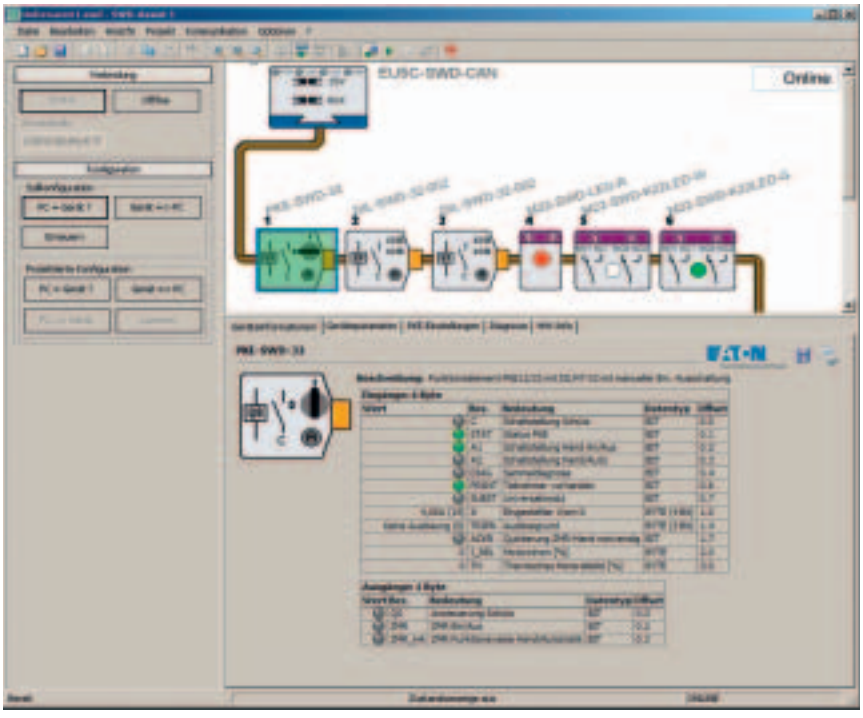
CoDeSys: Simple selection of the devices in the device configurator and the corresponding input/output addresses are automatically generated.



STEP7: Here you use the general GSD file and select the SmartWire-DT device yourself. Or you can use the project-specific GSD file generated in the design software.



RSLogix5000: After importing the configuration files into the programming system, all input/output data of the SmartWire-DT devices can be used directly.



Fast and comfortable online diagnostics

You can also directly access the SmartWire-DT devices over the configuration interface of the gateway. The entire SmartWire-DT network can be checked without a connected PLC. Reading and editing of the current configuration is possible just as is the display of states, parameter data and diagnostic messages. Differences between the existing configuration and the configuration defined in the control configurator are also displayed. Device faults are detected immediately and can be quickly remedied.

SmartWire-DT™.
From the control panel to the peripherals.

SmartWire-DT the basis for Lean Connectivity

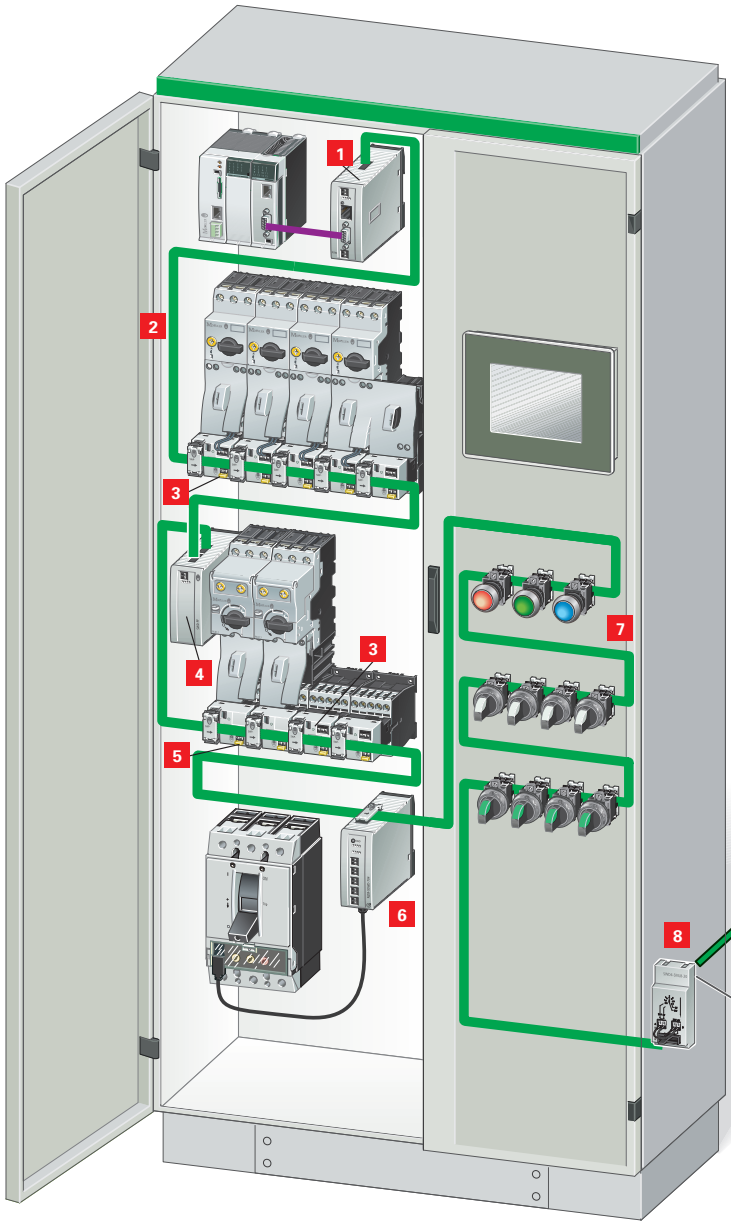
The conventional control wiring is replaced by SmartWire-DT. SmartWire-DT does not just provide interconnection of the components in the control panel, but also the interconnection of distributed operating panels or the coupling of control circuit devices or service distribution boards, that are distributed on the machine.

Lean Automation – HMI/PLC XV100

Product features:

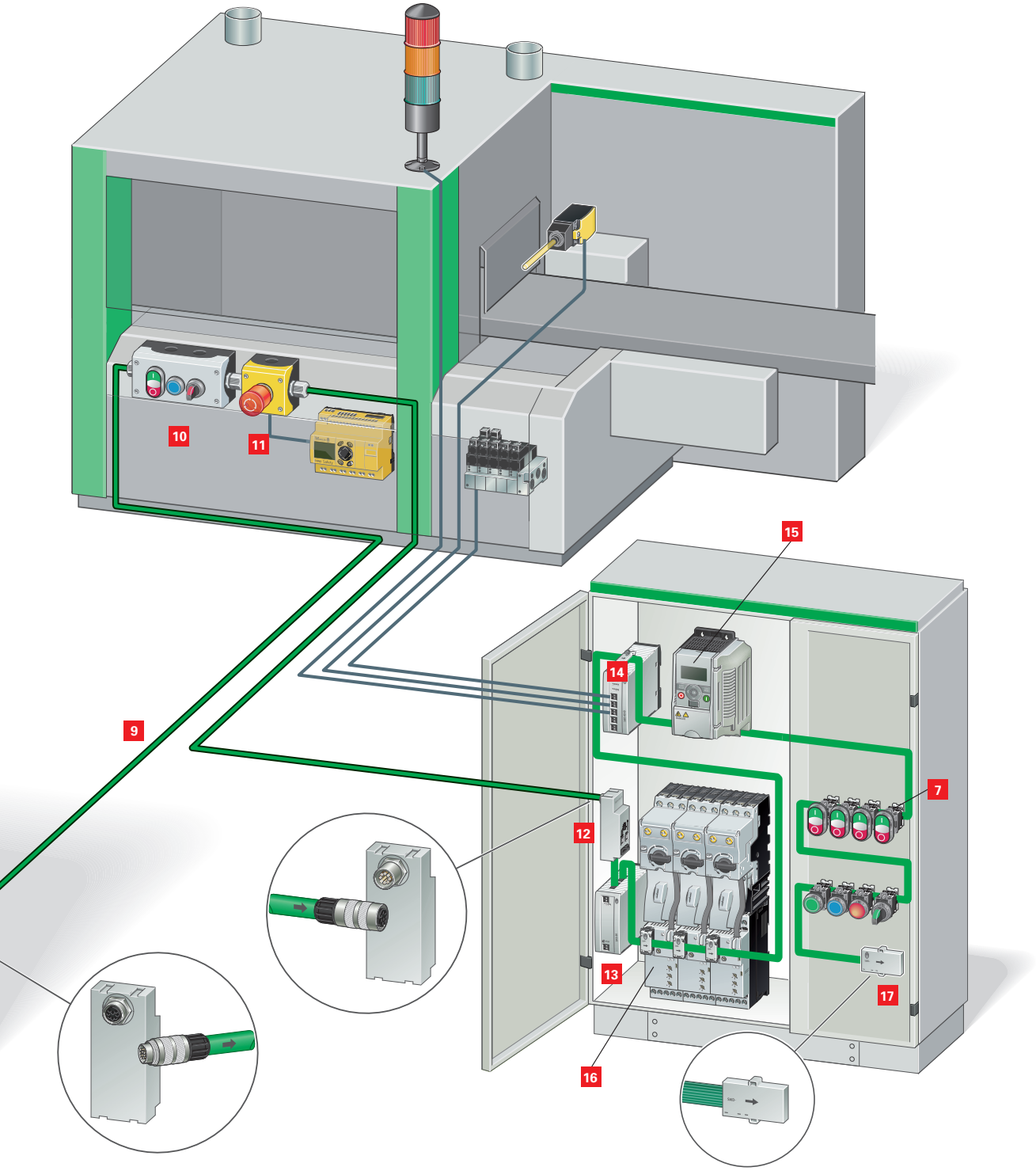
- The SmartWire-DT line can be configured easily via CoDeSys or SWD-Assist
- SmartWire-DT master with up to 99 slaves
- High performance thanks to a 400 MHz RISC processor, onboard memory
- Integrated 64 MB memory, if required expandable with an SD memory card
- Galileo visualization software or CoDeSys visualization





The SmartWire-DT networked control panel

1 Fieldbus gateway: Connection to the higher-level control
2 Flat cable
3 Function element for contactor DIL and motor starter MSC with PKZ
4 Powerfeed 1 (optional 24 V DC power supply)
5 Function element for motor starter MSC with PKE
6 Function element for circuit-breaker NZM
7 Function element front: control circuit devices RMQ Titan for front installation



8 Control panel feed-through socket
9 Round cable
10 M22-I… Surface mounting enclosure with circuit board, 3 installation positions
11 M22-PV… EMERGENCY-STOP surface mounting enclosure with circuit board, 1 installation position
12 Control panel feed-through plug
13 Powerfeed 2 (optional 15 V DC and 24 V DC power supply)
14 I/O module: connection of digital actuators / sensors
15 Frequency inverter M-Max
16 Soft starter DS 7
17 Bus terminator

SmartWire-DT-HMI-PLC

- HMI-PLC with integrated SmartWire-DT master interface
- Ethernet and USB interface
- Resistive touch with TFT display, 64K colors

	Display size	Resolution	Interfaces	Termination	Part no	Article no.
Plastic housing	3.5"	320 x 240	-		**XV-102-BE-35TQRC-10**	153524
	5.7"	640 x 480	CAN, RS485	SUB-D	**XV-102-E6-57TVRC-10**	153525
	5.7"	640 x 480	Profibus master, RS485	SUB-D	**XV-102-E8-57TVRC-10**	153526
	7"	800 x 480	CAN, RS485	SUB-D	**XV-102-E6-70TWRC-10**	153527
	7"	800 x 480	Profibus master, RS485	SUB-D	**XV-102-E8-70TWRC-10**	153528
Metal housing	5.7"	640 x 480	CAN, RS485	SUB-D	**XV-152-E6-57TVRC-10**	166700
	5.7"	640 x 480	Profibus Master, RS485	SUB-D	**XV-152-E8-57TVRC-10**	166701
	8.4"	640 x 480	CAN, RS485	SUB-D	**XV-152-E6-84TVRC-10**	166702
	8.4"	640 x 480	Profibus Master, RS485	SUB-D	**XV-152-E8-84TVRC-10**	166703
	10.4"	640 x 480	CAN, RS485	SUB-D	**XV-152-E6-10TVRC-10**	166704
	10.4"	640 x 480	Profibus Master, RS485	SUB-D	**XV-152-E8-10TVRC-10**	166705

easy800 with SmartWire-DT

Control relay for connection of SmartWire-DT and simultaneously for supply of power to the SmartWire-DT devices, such as switchgear and contactors

	Supply voltage	Description	Part no	Article no.
	24 V DC	Control relay with SmartWire-DT	**EASY802-DC-SWD**	152901
	24 V DC	Control relay with SmartWire-DT, 4 inputs, 2 of which can be used as outputs (transistor 24 V DC, 0.1 A), easyNet on board	**EASY806-DC-SWD**	152902

SmartWire-DT gateways

- Gateways for connecting the SmartWire-DT communication system to standard fieldbus systems

	Protocol	Baud rate	Number of SWDT slaves	Termination	Part no	Article no.
	Profibus DP V1 Slave	up to 12 MBit/s	max. 58	SUB-D	**EU5C-SWD-DP**	116308
	CANopen	up to 1 MBit/s	max. 99	SUB-D	**EU5C-SWD-CAN**	116307
	Ethernet IP / Modbus-TCP	10/100 MBits/s	max. 99	2*RJ45 (Switch)	**EU5C-SWD-EIP-MODTCP**	153163

SmartWire-DT I/O modules

- SmartWire-DT slaves for connecting digital I/O signals

	Digital inputs	Digital outputs	Relay outputs	Short-circuit proof	Part no	Article no.
	8	-	-	-	**EU5E-SWD-8DX**	116381
	4 with power supply	-	-	-	**EU5E-SWD-4DX**	144060
	4	4	-	•	**EU5E-SWD-4D4D**	116382
	4	-	2	-	**EU5E-SWD-4D2R**	116383
	-	8	-	•	**EU5E-SWD-X8D**	144061

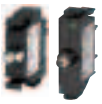
	Analog inputs	Sensor type	Analog outputs	Sensor type	Part no	Article no.
• SmartWire-DT slaves for connecting analog I/O signals						
	4	0-10V, 0-20mA	-		**EU5C-SWD-4AX**	144062
	2	0-10V, 0-20mA	2	0-10V, 0-20mA	**EU5C-SWD-2A2A**	144063
	4	PT100,PT1000, Ni1000	-		**EU5C-SWD-EIP-4PT**	144064

SmartWire-DT contactor modules

- SmartWire-DT module for fitting to contactors

	Contactor actuation, feedback signalling of switch status	Manual-Automatic switch	Digital inputs e.g. for connection to auxiliary contact	Part no	Article no.
	•	-	2	**DIL-SWD-32-001** (Std pack = 5)	118560
	•	•	2	**DIL-SWD-32-002** (Std pack = 5)	118561

	Contactor actuation, feedback signalling of contactor	Manual-Automatic switch	Status messages, settings	Analog information	Part no	Article no.
SmartWire-DT PKE module						
• SmartWire-DT module for fitting to motor starter combination with PKE12, 32						
	•	•	Overload, short-circuit, phase loss, setting value for overload release and tripping class	Actual current value, thermal motor image	**PKE-SWD-32** (Std pack = 4)	126895
SmartWire-DT PKE module						
• SmartWire-DT module for fitting to PKE12, 32, 65 motor-protective circuit-breakers						
	-	-	Overload, short-circuit, phase loss, setting value for overload release and tripping class, type of trip block	Actual current value, thermal motor image	**PKE-SWD** (Std pack = 4)	150613
					PKE-SWD-SP (Std pack = 1)	150614

	Number of contacts	LED color	Part no Front fixing	Article no.	Part no Base fixing	Article no.
SmartWire-DT RMQ function elements						
• SmartWire-DT function modules for connecting to M22 pilot devices						
	1 changeover contact	-	**M22-SWD-K11**	115964	**M22-SWD-KC11**	115995
	2 changeover contact	-	**M22-SWD-K22**	115965	**M22-SWD-KC22**	115996
	1 changeover contact	○	**M22-SWD-K11-LED-W**	115972	**M22-SWD-K11-LEDC-W**	116003
	1 changeover contact	●	**M22-SWD-K11-LED-B**	115973	**M22-SWD-K11-LEDC-B**	116004
	1 changeover contact	●	**M22-SWD-K11-LED-G**	115974	**M22-SWD-K11-LEDC-G**	116005
	1 changeover contact	●	**M22-SWD-K11-LED-R**	115975	**M22-SWD-K11-LEDC-R**	116006
	2 changeover contact	○	**M22-SWD-K22-LED-W**	115978	**M22-SWD-K22-LEDC-W**	116009
	2 changeover contact	●	**M22-SWD-K22-LED-B**	115979	**M22-SWD-K22-LEDC-B**	116010
	2 changeover contact	●	**M22-SWD-K22-LED-G**	115980	**M22-SWD-K22-LEDC-G**	116011
	2 changeover contact	●	**M22-SWD-K22-LED-R**	115981	**M22-SWD-K22-LEDC-R**	116012
	-	○	**M22-SWD-LED-W**	115966	**M22-SWD-LEDC-W**	115997
	-	●	**M22-SWD-LED-B**	115967	**M22-SWD-LEDC-B**	115998
	-	●	**M22-SWD-LED-G**	115968	**M22-SWD-LEDC-G**	115999
	-	●	**M22-SWD-LED-R**	115969	**M22-SWD-LEDC-R**	116000

	Status messages, settings	Analog information	Outputs	Energy measurements	Part no	Article no.
SmartWire-DT NZM module						
• SmartWire-DT interface module for NZM 2,3,4 circuit-breakers						
	Status NZM (ON, OFF, TRIPPED) load warnings, circuit-breaker type	Actual current values, setting values for overload release	2 digital inputs for connecting to remote switching unit	Energy meter in combination with NZM...-XMC energy measuring module	**NZM-XSWD-704**	135530

	Description			Part no	Article no.
SmartWire-DT accessories					
	Ribbon cable for laying the SmartWire-DT network inside the switch cabinet	100m	Prefabricated with 2 SWD4-8MF2 blade terminals	**SWD4-100LF8-24**	116026
		3m		**SWD4-3LF8-24-2S**	116027
		5m		**SWD4-5LF8-24-2S**	116028
		10m		**SWD4-10LF8-24-2S**	116029
	Device plug for connecting SmartWire-DT slaves			**SWD4-8SF2-5**	116022
	Blade terminal for connecting the ribbon cable to gateway, power feed module			**SWD4-8MF2**	116023
	Link for SWD4-8MF2 device plug for bridging open mounting sockets			**SWD4-SEL8-10**	116021
	Network termination for SmartWire-DT network			**SWD4-RC8-10**	116020
	Cable adapter, ribbon cable (plug) to round cable (terminal)			**SWD4-8FRF-10**	121377
	Switch cabinet entry from ribbon cable to round cable, both ends pluggable	Connection of round cable via socket		**SWD4-SFL8-20**	121380
		Connection of round cable via plug		**SWD4-SM8-20**	121381
	Round cable for laying the SmartWire-DT network outside of the switch cabinet		50m	**SWD4-50LR8-24**	116030
			250m	**SWD4-250LR-24**	144878
	Housing bushing for installation in M22-I surface mounted enclosure. 8-pole socket / plug with prefabricated cables		8-pole socket	**SWD4-SF8-20**	116031
			8-pole plug	**SWD4-SM8-20**	116032
	Pliers for SWD4-8SF2-5 device plug			**SWD4-CRP-1**	116025
	Pliers for SWD4-8MF2 blade terminal			**SWD4-CRP-2**	116699
	Universal slave for configured SmartWire-DT slaves that have not yet been installed		Front fixing	**M22-SWD-NOP**	147637
			Base fixing	**M22-SWD-NOPC**	147638

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