EC4P with and without display

EC4P controllers now offer the performance of a PLC in the housing of the renowned easy control relay. This enables the convenient creation of solutions for small and medium-sized control tasks. Simple programming to IEC-61131 using easySoft-CoDeSys is the basis for this, in conjunction with a powerful CPU. This communication capability of the controller is a special feature. Serial and Ethernet interfaces for programming and connecting to OPC clients, as well as CANopen and easyNet for networking with other fieldbus components allow a wide range of communication options.

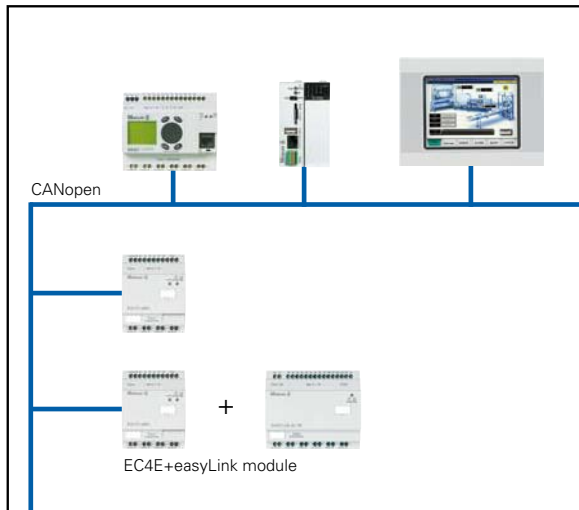| Basic units	easyControl							
Application	Compact PLC for different applications							
Type	EC4P-221-MTXD1*) EC4P-221-MTXX1*)	EC4P-221-MRXD1*) EC4P-221-MRXX1*)	EC4P-221-MTAD1*) EC4P-221-MTAX1*)	EC4P-221-MRAD1*) EC4P-221-MRAX1*)	EC4P-222-MTXD1*) EC4P-222-MTXX1*)	EC4P-222-MRXD1*) EC4P-222-MRXX1*)	EC4P-222-MTAD1*) EC4P-222-MTAX1*)	EC4P-222-MRAD1*) EC4P-222-MRAX1*)
Supply voltage	24 V DC							
Heat dissipation	7 W							
Inputs, digital	12	12	12	12	12	12	12	12
of which the following can be used as: inputs, analog 0 - 10 V	4	4	4	4	4	4	4	4
Outputs (R=Relay,T=Trans.), also (A=analog)	8T	6R	8T 1 A	6R 1 A	8T	6R	8T 1 A	6R 1 A
Continuous current outputs, digital [1]	0.5 A	8 A	0.5 A	8 A	0.5 A	8 A	0.5 A	8 A
Expandable/networkable	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes
easyNet/CANopen	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes
Ethernet	-	-	-	-	Yes	Yes	Yes	Yes
Temperature range	−25 °C to +55 °C							
Shipping approvals	DNV, GL, ABS, BV, LR							
Article no.	106391 106392	106393 106394	106395 106396	106397 106398	106399 106400	106401 106402	106403 106404	106405 106406

[1]   Relay = 8 A (10 A to UL) with resistive load, 3 A with inductive load/transistor outputs = 0,5 A / 24 V DC, max 4 outputs switchable in parallel
*)   D1 with display, X1 without display

The controllers of the EC4P series can be expanded with the standard easy I/Os:

Application	Expansions, analog inputs / outputs		Expansions, digital inputs / outputs					
			easyLink					
Type, Article no.	EASY406-DC-ME 114294	EASY411-DC-ME 116567	EASY202-RE 232186	EASY410-DC-RE 114293	EASY410-DC-TE 114294	EASY618-AC-RE 212314	EASY618-DC-RE 232112	EASY620-DC-TE 212313
Supply voltage	24 V DC	24 V DC	-	24 V DC	24 V DC	100-240 V AC	24 V DC	24 V DC
Inputs, digital	1 (3)	1 (3)	-	6	6	12	12	12
Inputs, analog	2*	6**	-	-	-	-	-	-
Outputs, digital (R=Relay, T= Trans.)	2T	2T	2R	4R	4T	6R	6R	8T
Outputs, analog (0-10 V)	1	2	-	-	-	-	-	-
Continuous current of outputs, digital1)	1A	1A	8A	8A	0,5A	8A	8A	0,5A
Degree of protection	IP 20							
Ambient operating temperature	- 25 °C ... + 55 °C							
Dimensions (WxHxD) mm	71,5x90x58		35,5x90x58	71,5x90x58		107,5x90x58		

1)   Relay = 8 A (10 A to UL) with resistive load, 3 A with inductive load/transistor outputs = 0.5 A / 24 V DC, max 4 outputs switchable in parallel
*   2 x 0-10 V or 2x 0-20 mA or 2x Pt100 (2/3 wire connection); voltage inputs (0-10 V) also suitable for optional digital use
**   2 x 0-10 V and 2x 0-20 mA and 2x Pt100 (2/3 wire connection); voltage inputs (0-10V) also suitable for optional digital use

Application	Expansions, CANopen with digital inputs / outputs	
Type	EC4E-221-6D4R1	EC4E-221-6D4T1
Supply voltage	24 V DC	24 V DC
Inputs, digital	6	6
Outputs (R=Relay, T=Trans.)	4R	4T
Continuous current of outputs, digital[1]	8 A	0,5 A
Degree of protection	IP 20	
Ambient operating temperature	- 25 °C ... + 55 °C	
Dimensions (WxHxD) mm	71,5 x 90 x 58	
Article no.	**114296**	**114297**

CANopen

EC4E+easyLink module

Flexible MFD-80 Text Display for CANopen and RS232

Display systems are being increasingly used in more and more applications. With smaller PLCs, the costs for these devices and the effort required for configuring the data exchange between the PLC and the display unit are often considerable. The MFD text display offers here the ideal solution for many applications. It consists of the MFD-80 display and a communication port either with a serial interface (MFD-CP4) or with a CANopen fieldbus connection (MFD-CP4-CO). The MFD-80 4-line display has IP65 protection at the front, offers customised laser inscription and can be used at temperatures as low as -25 °C. The display is programmed directly from the user program. Ready-to-use function blocks are simply assigned parameters with texts and variables.

Display	MFD-80
Display	4 x 16 characters
Character height	1, 2, 4-line
Degree of protection	IP65
Customised laser inscription	yes
Temperature range	−25 to 55 °C
Article no.	**265250**

Communication module	MFD-CP4 Article no. 280888	MFD-CP4-CO Article no. 115736
Interface	RS232	RS485
Protocol	easy	CANopen
Baud rate	max. 19,2 kB	max. 1 MB
Address		1–63
Temperature range	−25 to 55 °C	