

**Embedded Logic Engine and Expansion I/O**

The C445 is designed to allow function block programming to increase the logic capability of the C445. This logic allows a user to continue the current process logic or use logic that is configured locally. The logic engine can access the control parameters and I/O of the C445. The logic engine will access external expansion I/O. The C445 allows digital input up to 64 and digital output up to 64, plus up to 8 analog I/O cards. The analog I/O includes thermal measurement input modules. The expansion I/O utilizes the Modbus 485 connection on the C445 and the ELC-CARS485 communications module to communicate to the expansion I/O.

The following Expansion Modules are available: Communication module ELC-CARS485 plus I/O modules.

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Power	Input Unit		Output Unit		Digital I/O Model
	Point	Type	Point	Type	
<b>Dimensions W x H x D (mm): 25.2 x 90 x 60</b>					
24 Vdc	8	120 Vac	0	—	<b>ELC-EX08NNAN</b>
	8	DC sink or source	0	—	<b>ELC-EX08NNDN</b>
	0		8	Relay	<b>ELC-EX08NNNR</b>
	0		8	Transistor	<b>ELC-EX08NNNT</b>
	0		6	High current relay	<b>ELC-EX06NNNI</b>
	4		4	Relay	<b>ELC-EX08NNDR</b>
	8		8		<b>ELC-EX16NNDR</b>
	4		4	Transistor	<b>ELC-EX08NNDT</b>
	8		8		<b>ELC-EX16NNDT</b>
<b>Dimensions W x H x D (mm): 25.2 x 90 x 60</b>					
24 Vdc	0	—	2	0 mA to +20 mA 0 V to +10 V	<b>ELC-AN02NANN</b>
	0		4		<b>ELC-AN04NANN</b>
	4	−20 mA to +20 mA	2		<b>ELC-AN06AANN</b>
	4	−10 V to +10 V	0	—	<b>ELC-AN04ANNN</b>
	4	Platinum temp.	0		<b>ELC-PT04ANNN</b>
	4	Thermocouple	0		<b>ELC-TC04ANNN</b>