S15C-CT IO-Link Current Monitoring Sensor Product Manual

Original Instructions
p/n: 256301 Rev. A
05-Jun-26
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Chapter Contents

Models 3

Chapter 1 Features



(20 amp current transformer shown)

- Connects to the included current transformer and outputs the value to IO-Link process data
- Monitors AC current for various devices using current transformers
- Converts a high-voltage input to a proportional low-voltage, low-current signal for measuring and monitoring

Models

Model Name	Function	Current Transformer	Communication	Connector
S15C-CT20A-KQ	Converter	20 A Current Transformer	IO-Link	Integral male/female 4-pin M12 quick-disconnect connector
S15C-CT150A-KQ		150 A Current Transformer		
S15C-CT600A-KQ		600 A Current Transformer		

Split-core current transformers are used to monitor AC current for various devices. The current transformer input takes a high-voltage current input and produces a proportional low-voltage, low-current signal for measuring and monitoring. Split-core current transformers are ideal for installing onto existing electrical wiring because they can snap around the individual conductors without disconnecting any cables.

NOTE: Users can use any size current transformer rated up to a 655 A max rating, as long as the current transformer has a 333 mV AC output.

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Chapter Contents

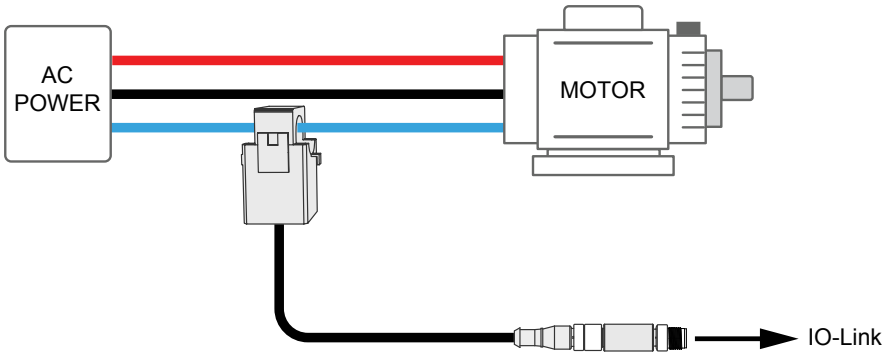
Wire the Current Transformer..... 4

Chapter 2 Installing the Current Transformers

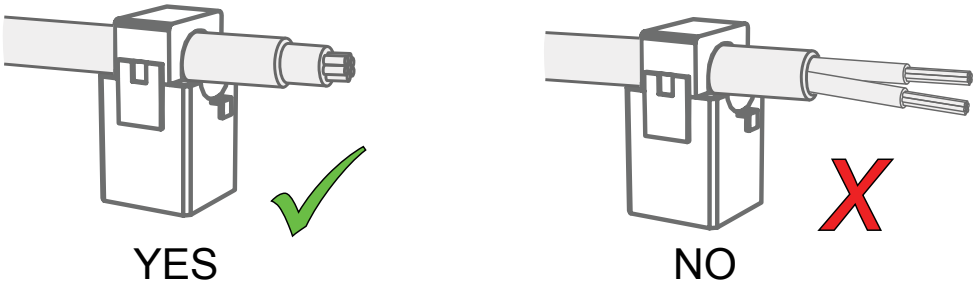
Observe the polarity when installing current transformers. Banner's current transformers indicate **k (S1)** as the source side and **l (S2)** as the load side, where source refers to the incoming power feed side to the device and the load side is the device side.

Banner's CTs have an etched arrow to indicate the directionality for installation (k (S1) -> l (S2)). As shown in "Figure: Installing a current transformer relative to the power supply/motor" on page 4, the source is the AC power supply and the load is the Motor. The CT direction arrow must point toward the load. Banner's current transformers can be installed on any conductor in a 2- or 3-phase AC line. Current transformers should only be installed on a single conductor. For the correct installation, see "Figure: Installing a single conductor on the current transformer" on page 4.

Installing a current transformer relative to the power supply/motor



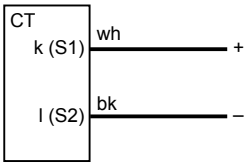
Installing a single conductor on the current transformer



Wire the Current Transformer

For more information on wiring and installing the current transformer, refer to the Split Core Current Transformer datasheet (p/n 212463).

Current transformer wiring



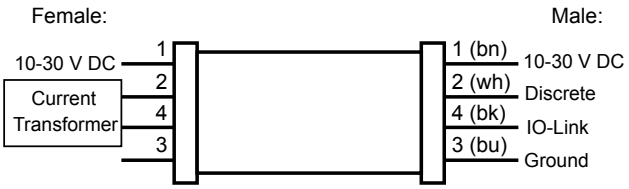
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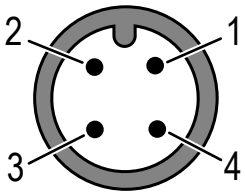
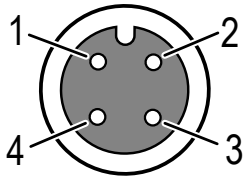
Wire Color	Description
White	Input from CT - k (S1)
Black	CT ground - l (S2)

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Chapter Contents

Chapter 3 Converter Wiring



Male (Gateway)	Female (Sensor)	Pin	Wire Color
		1	Brown
		2	White
		3	Blue
		4	Black

Female (Sensor)	Signal Description
Pin 1	10 V DC to 30 V DC
Pin 2	CT Input
Pin 3	Not Used
Pin 4	CT Ground

Male (IO-Link)	Signal Description
Pin 1	10 V DC to 30 V DC
Pin 2	Discrete
Pin 3	Ground
Pin 4	IO-Link

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Chapter 4 IO-Link Data Reference Guide

This document refers to the following IODD file: Banner_Engineering-S15C-CT-KQ-20260505-IODD1.1.xml.

The IODD file and support files can be found on www.bannerengineering.com under the download section of the product family page.

Comunication Parameters

The following communication parameters are used.

Parameter	Value
IO-Link revision	V1.1
Process Data In length	250 bits
Process Data Out length	N/A
Bit Rate	38400 bits/s
Minimum cycle time	4 ms
Port class	A
SIO mode	Yes
Smart sensor profile	No
Block parameterization	Yes
Data Storage	Yes
Device ID	659485
ISDU Supported	Yes

IO-Link Process Data In (Device to Master)

Process Data Mode (1): Smart Sensor Data Reference

Subindex	Name	Number of Bits
1	CT1: Amps RMS Value	16
2	CT1: Amps RMS Scale	8
3	CT1: Amps RMS Under Threshold	1
4	CT1: Amps RMS Over Threshold	1

Octet 0								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	255	254	253	252	251	250	249	248

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Octet 1								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	247	246	245	244	243	242	241	240

Octet 2								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	239	238	237	236	235	234	233	232

Octet 3								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	231	230	229	228	227	226	225	224

Octet 4								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	223	222	221	220	219	218	217	216

Octet 5								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	215	214	213	212	211	210	209	208

Octet 6								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	207	206	205	204	203	202	201	200

Octet 7								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	199	198	197	196	195	194	193	192

Octet 8								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	191	190	189	188	187	186	185	184

Octet 9								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	183	182	181	180	179	178	177	176

Octet 10								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	175	174	173	172	171	170	169	168

Octet 11								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	167	166	165	164	163	162	161	160

Octet 12								
Subindex	-	-	-	-	-	-	-	-

Continued on page 9

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Continued from page 8

Octet 12								
Bit Offset	159	158	157	156	155	154	153	152

Octet 13								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	151	150	149	148	147	146	145	144

Octet 14								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	143	142	141	140	139	138	137	136

Octet 15								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	135	134	133	132	131	130	129	128

Octet 16								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	127	126	125	124	123	122	121	120

Octet 17								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	119	118	117	116	115	114	113	112

Octet 18								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	111	110	109	108	107	106	105	104

Octet 19								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	103	102	101	100	99	98	97	96

Octet 20								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	95	94	93	92	91	90	89	88

Octet 21								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	87	86	85	84	83	82	81	80

Octet 22								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	79	78	77	76	75	74	73	72

Octet 23								
Subindex	-	-	-	-	-	-	-	-

Continued on page 10

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Continued from page 9

Octet 23								
Bit Offset	71	70	69	68	67	66	65	64

Octet 24								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	63	62	61	60	59	58	57	56

Octet 25								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	55	54	53	52	51	50	49	48

Octet 26								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	47	46	45	44	43	42	41	40

Octet 27								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	39	38	37	36	35	34	33	32

Octet 28								
Subindex	-	-	-	-	-	-	4	3
Bit Offset	31	30	29	28	27	26	25	24

Octet 29								
Subindex	2	2	2	2	2	2	2	2
Bit Offset	23	22	21	20	19	18	17	16

Octet 30								
Subindex	1	1	1	1	1	1	1	1
Bit Offset	15	14	13	12	11	10	9	8

Octet 31								
Subindex	1	1	1	1	1	1	1	1
Bit Offset	7	6	5	4	3	2	1	0

Process Data Mode (2): Floating Point Data Reference

Subindex	Name	Number of Bits
1	CT1: Amps RMS Value	32
2	CT1: Amps RMS Over Threshold	8
3	CT1: Amps RMS Under Threshold	1

Octet 0								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	255	254	253	252	251	250	249	248

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Octet 1								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	247	246	245	244	243	242	241	240

Octet 2								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	239	238	237	236	235	234	233	232

Octet 3								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	231	230	229	228	227	226	225	224

Octet 4								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	223	222	221	220	219	218	217	216

Octet 5								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	215	214	213	212	211	210	209	208

Octet 6								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	207	206	205	204	203	202	201	200

Octet 7								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	199	198	197	196	195	194	193	192

Octet 8								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	191	190	189	188	187	186	185	184

Octet 9								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	183	182	181	180	179	178	177	176

Octet 10								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	175	174	173	172	171	170	169	168

Octet 11								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	167	166	165	164	163	162	161	160

Octet 12								
Subindex	-	-	-	-	-	-	-	-

Continued on page 12

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Continued from page 11

Octet 12								
Bit Offset	159	158	157	156	155	154	153	152

Octet 13								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	151	150	149	148	147	146	145	144

Octet 14								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	143	142	141	140	139	138	137	136

Octet 15								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	135	134	133	132	131	130	129	128

Octet 16								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	127	126	125	124	123	122	121	120

Octet 17								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	119	118	117	116	115	114	113	112

Octet 18								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	111	110	109	108	107	106	105	104

Octet 19								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	103	102	101	100	99	98	97	96

Octet 20								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	95	94	93	92	91	90	89	88

Octet 21								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	87	86	85	84	83	82	81	80

Octet 22								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	79	78	77	76	75	74	73	72

Octet 23								
Subindex	-	-	-	-	-	-	-	-

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Continued from page 12

Octet 23								
Bit Offset	71	70	69	68	67	66	65	64

Octet 24								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	63	62	61	60	59	58	57	56

Octet 25								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	55	54	53	52	51	50	49	48

Octet 26								
Subindex	-	-	-	-	-	-	-	-
Bit Offset	47	46	45	44	43	42	41	40

Octet 27								
Subindex	-	-	-	-	-	-	3	2
Bit Offset	39	38	37	36	35	34	33	32

Octet 28								
Subindex	1	1	1	1	1	1	1	1
Bit Offset	31	30	29	28	27	26	25	24

Octet 29								
Subindex	1	1	1	1	1	1	1	1
Bit Offset	23	22	21	20	19	18	17	16

Octet 30								
Subindex	1	1	1	1	1	1	1	1
Bit Offset	15	14	13	12	11	10	9	8

Octet 31								
Subindex	1	1	1	1	1	1	1	1
Bit Offset	7	6	5	4	3	2	1	0

IO-Link Process Data Out (Master to Device)

Not applicable.

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Parameters Set Using IO-Link

These parameters can be read from and/or written to an IO-Link model of the S15C-CTxxA-KQ. Also included is information about whether the variable in question is saved during Data Storage and whether the variable came from the IO-Link Smart Sensor Profile. Unlike Process Data In, which is transmitted from the IO-Link device to the IO-Link master cyclically, these parameters are read or written acyclically as needed.

Index	Subindex	Name	Length	Value Range	Default	Access Rights	Data Storage?	Smart Sensor Profile
0	1-16	Direct Parameter Page 1 (incl. Vendor ID & Device ID)				RO		
2		System Command		126 = Locator Start 127 = Locator Stop 129 = Application Reset 131 = Back to Box		WO		Y
16		Vendor Name string		Banner Engineering Corporation		RO		
17		Vendor Text string		More Sensors. More Solutions.		RO		
18		Product Name string		S15C-CTxxA-KQ		RO		
19		Product ID string		S15C-CTxxA-KQ		RO		
20		Product Text string		S15C-CTxxA-KQ		RO		Y
21		Serial Number				RO		
22		Hardware Version				RO		
23		Firmware Version				RO		Y
24		App Specific Tag (user-defined)		More Sensors. More Solutions.		RW	Y	Y
25		Function Tag		More Sensors. More Solutions.		RW	Y	Y
26		Location Tag		More Sensors. More Solutions.		RW	Y	Y
32		Error Count	16-bit Uinteger			RO		
36		Device Status	8-bit Uinteger	0 = Device is OK 1 = Maintenance required 2 = Out of specification 3 = Functional check 4 = Failure 5..255 Reserved		RO		
37		Detailed Device Status	Array[4] of 3-octet			RO		
69		**All-Time Run Time**						
69	1	Run counter (0.25hr)	32-bit Uinteger	0..2147483647		RO	Y	
70		**Resettable Run Time**						
70	1	Run counter (0.25hr)	32-bit Uinteger	0..2147483647	0	RW		
71		**Alarm Configuration**						
71	1	CT1: Amps RMS Low Threshold	Float32		0	RW	Y	
71	2	CT1: Amps RMS High Threshold	Float32		600	RW	Y	

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Index	Subindex	Name	Length	Value Range	Default	Access Rights	Data Storage?	Smart Sensor Profile
71	3	CT1: Amps RMS On Delay	Float32		0	RW	Y	
71	4	CT1: Amps RMS Off Delay	Float32		0	RW	Y	
72		**Alarm Counter**						
72	1	CT1: Amps RMS Low Counter	16-bit UInteger		0	RW	Y	
72	2	CT1: Amps RMS High Counter	16-bit UInteger		0	RW	Y	
80		**Process Data Mode**						
80	1	Defines the formatting of the Process Data	8-bit Uinteger	1 = Smart Sensor Profile, 2 = Floating Point Profile	1	RW	Y	
81		**Wire Mode**						
81	1	Output Configuration	8-bit Uinteger	0 = BannerBus 1 = NPN Discrete Output 2 = PNP Discrete Output	0	RW	Y	
82		**Device Configuration**						
82	1	Sample Rate (10ms)	32-bit Record			RW	Y	
82	2	Frequency (Hz)	8-bit Record	1 = 60 Hz, 2 = 50 Hz		RW	Y	
82	3	CT Rating (Amps)	16-bit Record			RW	Y	

IO-Link Events

Events are acyclic transmissions from the IO-Link device to the IO-Link master. Events can be error messages and/or warning or maintenance data.

Code	Type	Name	Description
0 (0x0000)	Notification	No Malfunction	-
20480 (0x5000)	Error	Device hardware fault	Device Exchange

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Chapter Contents

Chapter 5 Status Indicators

Power LED Indicator (Green)

- Solid Green = Power On
- Off = Power Off

IO-Link Communication LED Indicator (Amber)

- Flashing Amber (4 Hz) = IO-Link communications are active
- Off = IO-Link communications are not present

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Chapter 6 Specifications

Supply Voltage
18 V DC to 30 V DC at 50 mA maximum

Power Pass-Through Current
4 A maximum

Supply Protection Circuitry
Protected against reverse polarity and transient voltages

Leakage Current Immunity
400 µA

Resolution
12-bits

Current Transformer
Electrical:

Rated Input: 0-20 A (CT20A), 0-150 A (CT150A), or 0-600 A (CT600A), depending on the model
Rated Output: 0.333 V AC
Ratio: ≤ ± 1.0%
Phase Angle: ≤ ± 60 min
Dielectric Strength: 2.5 kV/1 mA/1 min
Insulation Resistance: DC 500 V/100 MΩ min

Mechanical:

Case: PA / UL94-V0
Bobbin: PBT
Core: Silicon Steel
–25 °C to +75 °C (–13 °F to +167 °F)
≤ 85% maximum relative humidity (non-condensing)

For more information, refer to the Split Core Current Transformer datasheet (p/n 212463)

Required Overcurrent Protection

WARNING: Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

Overcurrent protection is required to be provided by end product application per the supplied table.

Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply.

Supply wiring leads < 24 AWG shall not be spliced.

For additional product support, go to www.bannerengineering.com.

Indicators
Green power
Amber IO-Link communications

Connections
Integral male/female 4-pin M12 quick-disconnect connector

Construction
Coupling Material: Nickel-plated brass
Connector Body: PVC translucent black

Vibration and Mechanical Shock
Meets IEC 60068-2-6 requirements (Vibration: 10 Hz to 55 Hz, 0.5 mm amplitude, 5 minutes sweep, 30 minutes dwell)
Meets IEC 60068-2-27 requirements (Shock: 15G 11 ms duration, half sine wave)

Environmental Rating
IP65, IP67, IP68
UL Type 1

Operating Conditions
Temperature: –40 °C to +70 °C (–40 °F to +158 °F)
90% at +70 °C maximum relative humidity (non-condensing)
Storage Temperature: –40 °C to +80 °C (–40 °F to +176 °F)

Product Identification

SNAP SIGNAL

Supply Wiring (AWG)	Required Overcurrent Protection (A)	Supply Wiring (AWG)	Required Overcurrent Protection (A)
20	5.0	26	1.0
22	3.0	28	0.8
24	2.0	30	0.5

Certifications

Banner Engineering BV
Park Lane, Culliganlaan 2F bus 3
1831 Diegem, BELGIUM

Turck Banner LTD Blenheim House
Blenheim Court
Wickford, Essex SS11 8YT
GREAT BRITAIN

c UL us LISTED

FCC Part 15 Class A for Unintentional Radiators

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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(Part 15.21) Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

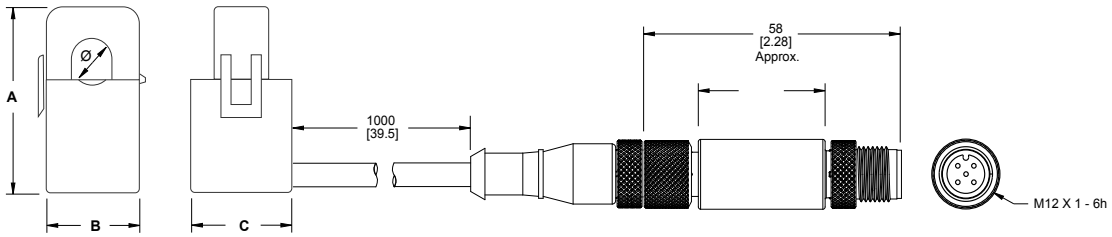
Industry Canada ICES-003(A)

This device complies with CAN ICES-3 (A)/NMB-3(A). Operation is subject to the following two conditions: 1) This device may not cause harmful interference; and 2) This device must accept any interference received, including interference that may cause undesired operation.

Cet appareil est conforme à la norme NMB-3(A). Le fonctionnement est soumis aux deux conditions suivantes : (1) ce dispositif ne peut pas occasionner d'interférences, et (2) il doit tolérer toute interférence, y compris celles susceptibles de provoquer un fonctionnement non souhaité du dispositif.

Current Transformer Dimensions

All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.



Model	Diameter	A	B	C
CT20A	10 mm (0.39 in)	41 mm (1.61 in)	24 mm (0.94 in)	26.5 mm (1.04 in)
CT150A	16 mm (0.63 in)	45.5 mm (1.79 in)	29 (1.14 in)	31.5 mm (1.24 in)
CT600A	34.6 mm (1.36 in)	99.2 mm (3.91 in)	68.7 mm (2.7 in)	42 mm (1.65 in)

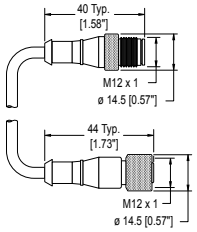
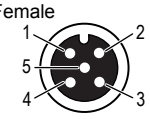
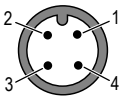
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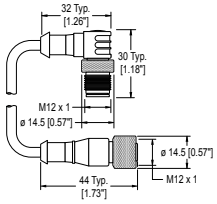
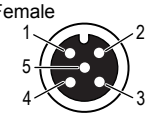
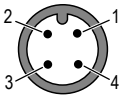
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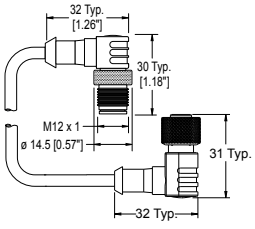
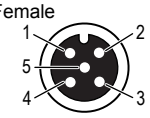
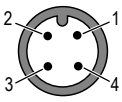
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Chapter 7 Accessories

Cordsets

4-pin A-Code Double-Ended M12 Female to M12 Male Cordsets (datasheet p/n 236186)				
Model	**Length**	**Dimensions (mm)**	**Pinouts**	
BC-M12F4-M12M4-22-1	1 m (3.28 ft)		Female  Male 	1 = Brown 2 = White 3 = Blue 4 = Black 5 = Unused c UL us LISTED
BC-M12F4-M12M4-22-2	2 m (6.56 ft)			
BC-M12F4-M12M4-22-3	3 m (9.84 ft)			
BC-M12F4-M12M4-22-4	4 m (13.12 ft)			
BC-M12F4-M12M4-22-5	5 m (16.4 ft)			
BC-M12F4-M12M4-22-10	10 m (30.81 ft)			
BC-M12F4-M12M4-22-15	15 m (49.2 ft)			

4-pin A-Code Double-Ended M12 Female to M12 Male Right-Angle Cordsets (datasheet p/n 236186)				
Model	**Length**	**Dimensions (mm)**	**Pinouts**	
BC-M12F4-M12M4A-22-1	1 m (3.28 ft)		Female  Male 	1 = Brown 2 = White 3 = Blue 4 = Black 5 = Unused c UL us LISTED
BC-M12F4-M12M4A-22-2	2 m (6.56 ft)			
BC-M12F4-M12M4A-22-5	5 m (16.4 ft)			
BC-M12F4-M12M4A-22-8	8 m (26.25 ft)			
BC-M12F4-M12M4A-22-10	10 m (30.81 ft)			
BC-M12F4-M12M4A-22-15	15 m (49.2 ft)			

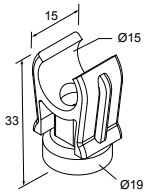
4-pin A-Code Double-Ended M12 Female Right-Angle to M12 Male Right-Angle Cordsets (datasheet p/n 236186)				
Model	**Length**	**Dimensions (mm)**	**Pinouts**	
BC-M12F4A-M12M4A-22-0.3	0.3 m (1 ft)		Female  Male 	1 = Brown 2 = White 3 = Blue 4 = Black 5 = Unused c UL us LISTED
BC-M12F4A-M12M4A-22-1	1 m (3.28 ft)			
BC-M12F4A-M12M4A-22-2	2 m (6.56 ft)			
BC-M12F4A-M12M4A-22-5	5 m (16.4 ft)			
BC-M12F4A-M12M4A-22-8	8 m (26.25 ft)			
BC-M12F4A-M12M4A-22-10	10 m (30.81 ft)			
BC-M12F4A-M12M4A-22-15	15 m (49.2 ft)			

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Bracket

LMBS15MAG

- Attaches to S15 housing
- White polypropylene
- 11.8 kg (26 lb) pull force
- One piece
- CAD Files: DXF, PDF, IGS, STP



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Chapter 8 Product Support and Maintenance

Clean with Mild Detergent and Warm Water

Wipe down the device with a soft cloth dampened with a mild detergent and warm water solution. Do not use any other chemicals for cleaning.

Repairs and Translations (No Field-Replaceable Parts)

English

Contact Banner Engineering for troubleshooting of this device. **Do not attempt any repairs to this Banner device; it contains no field-replaceable parts or components.** If the device, device part, or device component is determined to be defective by a Banner Applications Engineer, they will advise you of Banner's RMA (Return Merchandise Authorization) procedure.

```
IMPORTANT: If instructed to return the device, pack it with care. Damage that occurs in return
shipping is not covered by warranty.
```

Obtain assistance with product repairs by contacting your local Banner Engineering Corp distributor or by calling Banner directly at (763) 544-3164. Access literature translated into your native language on the Banner website at www.bannerengineering.com or contact Banner directly at (763) 544-3164.

Deutsch

Wenden Sie sich zur Fehlerbehebung dieses Geräts an Banner Engineering. **Versuchen Sie nicht, Reparaturen an diesem Banner-Gerät vorzunehmen. Das Gerät enthält keine am Einsatzort auszuwechselnden Teile oder Komponenten.** Wenn ein Banner-Anwendungstechniker zu dem Schluss kommt, dass dieses Gerät, ein Teil oder eine Komponente davon defekt ist, erhalten Sie von dem Techniker Erläuterungen zu Banners RMA-Verfahren (Return Merchandise Authorization) für die Warenrückgabe.

```
WICHTIG: Wenn Sie der Techniker anweist, das Gerät zurückzusenden, verpacken Sie es bitte
sorgfältig. Transportschäden bei der Rücksendung werden von der Garantie nicht abgedeckt.
```

Unterstützung bei Produktreparaturen erhalten Sie von Ihrem örtlichen Banner Engineering Corp Händler oder direkt von Banner unter Tel. (763) 544-3164. Die in Ihre Muttersprache übersetzte Literatur finden Sie auf der Banner-Website unter www.bannerengineering.com oder kontaktieren Sie Banner direkt unter Tel. (763) 544-3164.

Français

Pour plus d'informations sur le dépannage du produit, contactez Banner Engineering. **Ne tentez pas de réparer ce dispositif Banner. Il ne contient aucun composant ou pièce qui puisse être remplacé sur place.** Si un ingénieur de Banner conclut que le dispositif ou l'une de ses pièces ou composants est défectueux, il vous informera de la procédure à suivre pour le retour des produits (RMA).

```
Important : Si vous devez retourner le dispositif, emballez-le avec soin. Les dégâts
occasionnés pendant le transport de retour ne sont pas couverts par la garantie.
```

Pour vous aider lors de la réparation de produits, contactez votre distributeur Banner local our appelez directement Banner au (763) 544-3164. La documentation traduite dans votre langue est disponible sur le site internet de Banner www.bannerengineering.com ou contactez directement Banner au (763) 544-3164.

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Italiano

Per le procedure di individuazione e riparazione dei guasti di questo dispositivo, contattare Banner Engineering. **Non tentare di riparare questo dispositivo Banner, in quanto non contiene parti o componenti sostituibili dall'utente.** Se il dispositivo, una parte del dispositivo o un componente del dispositivo viene riscontrato difettoso da un tecnico Banner, il nostro personale vi comunicherà la procedura da seguire per ottenere l'autorizzazione al reso.

> **Importante:** Se si ricevono istruzioni di rispedire il dispositivo al produttore, imballarlo con cura. I danni dovuti al trasporto non sono coperti dalla garanzia.

Per assistenza nelle riparazioni dei prodotti, contattare il distributore locale Banner Engineering Corp o contattare direttamente Banner al numero (763) 544-3164. È possibile accedere alla documentazione tradotta nella propria lingua madre sul sito Web Banner all'indirizzo www.bannerengineering.com o contattare direttamente Banner al numero (763) 544-3164.

Español

Comuníquese con Banner Engineering para solucionar de problemas de este dispositivo. **No intente ninguna reparación a este dispositivo de Banner, contiene piezas o componente que no se pueden cambiar en terreno.** Si algún ingeniero de aplicaciones de Banner determina que el dispositivo, alguna de las piezas o alguno de los componentes del dispositivo está defectuoso, le informará el procedimiento de autorización de devolución de mercancía (RMA, por sus siglas en inglés) de Banner.

> **Importante:** Si se le solicita devolver el dispositivo, empáquelo con cuidado. Puede haber daños durante el envío de devolución que no estén cubiertos por la garantía.

Para reparaciones de productos, por favor contacte a su distribuidor local de Banner Engineering o llame a Banner directamente al 00 1 (763) 544-3164. Vea la literatura traducida en su idioma en el sitio web Banner en www.bannerengineering.com o comuníquese con Banner directamente al 00 1 (763) 544-3164.

中国人

如需对本装置进行故障排查，请联系邦纳。**请勿尝试自行维修该邦纳装置；本装置不包含任何可在现场更换的部件或组件。** 若经邦纳应用工程师确认设备、设备部件或组件存在缺陷，他们将告知您邦纳退货授权 (RMA) 流程。

> **重要注意事项：** 如被要求退回装置，请妥善包装后寄回。退货运输过程中发生的损坏不在保修范围内。

请联系当地的 Banner Engineering Corp 经销商或直接致电 Banner +1 (763) 544-3164，以获得产品维修帮助。请访问邦纳网站 www.bannerengineering.com 或直接拨打 +1 (763) 544-3164 联系邦纳，获取翻译成您母语的资料。

한국인

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日本語

この装置のトラブルシューティングについては、バナーエンジニアリングにお問い合わせください。**このバナー装置には、現場では交換できない部品またはコンポーネントが含まれているため、修理を試みてはいけません。** バナーのアプリケーションエンジニアが装置、装置の部品、または装置のコンポーネントに欠陥があると判断した場合、バナーのRMA（返品承認）手続きについてお知らせします。

> **重要 ：** 返品を指示された場合は、装置を丁寧に梱包してください。返品時に発生した破損は保証の対象外となります。

製品の修理については、最寄りのBanner Engineering Corp代理店にお問い合わせいただくか、米国+1 (763) 544-3164まで直接お電話でお問い合わせください。バナーのウェブサイト（www.bannerengineering.com）でお客様の言語に翻訳された資料にアクセスするか、米国+1 (763) 544-3164まで直接お電話でお問い合わせください。

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čeština

Pro řešení problémů se zařízením kontaktujte společnost Banner Engineering. **Neprovádějte žádné opravy zařízení Banner. Neobsahují žádné komponenty nebo části, které by byly vyměnitelné.** Pokud je zařízení, jeho část nebo díl označen technikem společnosti Banner jako poškozený, bude Vám doporučeno vyplnit reklamační RMA protokol.

```
Důležité: Pokud byl vydán požadavek na vrácení zařízení, pečlivě ho zabalte. Poškození vzniklé
při dopravě není považováno za záruční opravu.
```

Pokud produkt potřebuje opravu, vyžádejte si pomoc od místního distributora společnosti Banner Engineering Corp nebo přímo na telefonním čísle (763) 544-3164. Dokumentaci přeloženou do vašeho jazyka si vyhledejte na webových stránkách společnosti Banner na adrese www.bannerengineering.com nebo se obraťte přímo na společnost Banner na telefonním čísle (763) 544-3164.

Polski

W celu rozwiązania problemów z urządzeniem należy skontaktować się z działem technicznym firmy Banner Engineering. **Pod żadnym pozorem nie próbuj naprawiać tego urządzenia firmy Banner; nie zawiera ono części ani elementów, które można wymieniać samodzielnie.** Jeśli urządzenie, jego część lub element zostaną uznane za wadliwe przez inżyniera technicznego Banner, poinformuje on użytkownika o firmowej procedurze zwrotu towaru (RMA) firmy Banner.

```
Ważne: Jeśli urządzenie ma zostać zwrócone, należy je starannie zapakować. Uszkodzenia powstałe
podczas odsyłki nie są objęte gwarancją.
```

Aby uzyskać pomoc w zakresie naprawy produktu, należy skontaktować się z lokalnym dystrybutorem Banner Engineering Corp lub zadzwonić bezpośrednio do firmy Banner pod numer (763) 544-3164. Dostęp do literatury przetłumaczonej na swój język ojczysty można uzyskać na stronie internetowej firmy Banner pod adresem www.bannerengineering.com lub kontaktując się bezpośrednio z firmą Banner pod numerem (763) 544-3164.

Português

Entre em contato com a Engenharia da Banner para a solução de problemas deste dispositivo. **Não tente fazer nenhum reparo neste dispositivo Banner; ele não contém peças ou componentes substituíveis em campo.** Se um técnico de aplicações da Banner determinar que o dispositivo, peça ou componente do dispositivo está com defeito, ele o informará sobre o procedimento de RMA (Autorização de Devolução de Mercadoria) da Banner.

```
Importante: Se for instruído a devolver o dispositivo, embale-o com cuidado. Os danos ocorridos
no transporte de devolução não são cobertos pela garantia.
```

Obtenha assistência para reparos do produto entrando em contato com o distribuidor local da Banner Engineering Corp ou ligando diretamente para a Banner no telefone (763) 544-3164. Acesse a literatura traduzida para seu idioma nativo no site da Banner em www.bannerengineering.com ou entre em contato diretamente com a Banner pelo telefone (763) 544-3164.

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```
ÖNEMLİ: İade etmeniz istenirse, cihazı dikkatli bir şekilde paketleyin. İade nakliyesinde
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```

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Contact Us

Banner Engineering Corp. | 9714 Tenth Avenue North | Plymouth, MN 55441, USA | Phone: + 1 888 373 6767

For worldwide locations and local representatives, visit www.bannerengineering.com.

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