



Type(s)
Project
Date
Notes

GENERAL INFORMATION

Sensor power control modules are designed for use in all ESR3 modular enclosures. Whether you need forward-phase or reverse-phase SCR dimming, relay control, or the flexible control of our ThruPower modules, Sensor has you covered.

Most modules provides two circuits of control for a wide range of applications. Advanced Features (AF) modules enable dimmer-specific feedback of load circuit data in SensorAF enclosures. All modules feature modular installation and removal, fully magnetic circuit breakers, and rock-solid construction.

APPLICATIONS

- Tungsten lighting
- Low voltage lighting
- Non-dim loads
- Moving lights, fog machines, and powered effects
- Electronic transformers
- Electronic LED power supplies
- 2-wire Fluorescent ballast
- 4-wire Fluorescent ballast (requires ETC Response 0-10V Gateway)
- Quartz lighting
- Neon lighting
- Cold Cathode lighting

FEATURES

- High-density modular assembly
- Die-cast aluminum chassis
- Fully magnetic circuit breakers
- Temperature sensors

ADVANCED FEATURES (AF)*

- Built-in per-circuit voltage and current sensing
- Advanced Features error messages:
 - Load dropped below recorded value
 - Load increased over recorded value
 - Circuit breaker tripped
 - Dimmer module removed
 - Dimmer load absent

*Access to AF features require an AF-equipped Sensor enclosure

REGULATORY AND COMPLIANCE

- CE compliant for use in Sensor Dimming Enclosure

Phase dimming performance for LED lamps varies considerably depending on the manufacturer and model. Visit <http://www.etconnect.com/compatibility/> for details on a variety of specific lamps and information on how to send samples to ETC for testing.



SPECIFICATIONS**GENERAL**

- Rated for continuous duty at 100% of rated load
- 1.3 kW, 2.3 kW, 3 kW, 5 kW, and 10 kW circuits

PHYSICAL

- Modular plug-in assemblies
- Cast aluminum chassis, finished with textured epoxy paint
- Keyed to prevent insertion in inappropriately rated enclosure positions

CIRCUIT BREAKERS

- Hydraulic-magnetic to eliminate nuisance tripping
- EN60898 Type C standard trip curve
- Rated for 100% switching duty applications

SHORT CIRCUIT RATINGS

- Modular assembly Rating 22,500 A Icn (TUV tested as an assembly)
- Modules withstand hot-patching of cold loads up to full rating

POWER DEVICE

- Sealed, patented assembly
- Field-replaceable with screwdriver (except EELV and PhaseAdept)
- Two back-to-back SCRs per circuit (ED and ETR modules)
- Per-circuit LED indicators
- Mechanical held air gap relay (ER and ETR modules)
- Integral bonded heatsink
- Integral temperature sensor

FILTERING

- High quality toroidal filters (see module chart for rise times)

LOW VOLTAGE DIMMING

- Dimming of 2 and 4-wire fluorescent ballast is dependent on lamp ballast combination. 4-wire fluorescent control requires Response 0–10V Gateway. Contact ETC
- PhaseAdept (LED) modules provide forward- or reverse-phase dimming and are compatible with any ETC Unison DR, Unison DRd or Sensor enclosure, including legacy products
- ELV modules provide forward- or reverse-phase dimming and are compatible with Sensor+ and Sensor3 enclosures

ESR3 DIMMER MODULE CHART

Model Number Key

Module Type - Identifies the function of the module: ETR (ThruPower), ETD (ThruPower), ED (Dimmer), ER (Relay), ECC (Constant), ELED (PhaseAdept), EELV (Electronic Low Voltage)

NUMBER - Identifies the rated max current per circuit within the module; for example, an ED15 module provides dimming for two 15A circuits

AF - Module provides advanced features (AF) feedback per circuit; requires Sensor rack with AF cards for full functionality

R - Module provides per-circuit RCD circuit breaker protection

N - Module is compatible with Neutral Disconnect Sensor racks but does not provide RCD protection

E - Module is designed specifically to provide a sense line for use in emergency systems

AFM - Module body without electronics for rack slots without branch circuits; ensures proper air flow and rack cooling

Accessories

7071A2026 - Triple Neutral Jumper (One needed per single pole module, i.e. non-ND or non-RCD)

ThruPower Modules

PART NUMBER	MODEL	CURRENT/ WATTAGE/RISE TIME	CIRCUITS	RACK SLOTS	EFFICIENCY	MAX BTU/ HR WATTS/ CHANNEL	WT / SHIP WT	DIMENSIONS
7070A1201	ETR6AF	6 A / 1.3 kW / 400 μ s	2	1	96.5%	87 BTU / 26 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 172 mm
7070A1204	ETR6SAF	6 A / 1.3 kW / 225 μ s	2	1	96.5%	87 BTU / 26 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 172 mm
7070A1202	ETR6AFN	6 A / 1.3 kW / 400 μ s	2	1	96.5%	87 BTU / 26 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 172 mm
7070A1205	ETR6SAFN	6 A / 1.4 kW / 225 μ s	2	1	96.5%	87 BTU / 26 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 172 mm
7070A1203	ETR6AFR	6 A / 1.4 kW / 400 μ s	2	1	96.5%	87 BTU / 26 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 172 mm
7070A1206	ETR6SAFR	6 A / 1.4 kW / 225 μ s	2	1	96.5%	87 BTU / 26 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 172 mm
7070A1211	ETR10AF	10 A / 2.3 kW / 400 μ s	2	1	96.5%	145 BTU / 43 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 172 mm
7070A1214	ETR10SAF	10 A / 2.3 kW / 225 μ s	2	1	96.5%	145 BTU / 43 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 172 mm
7070A1212	ETR10AFN	10 A / 2.3 kW / 400 μ s	2	1	96.5%	145 BTU / 43 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 172 mm
7070A1215	ETR10SAFN	10 A / 2.3 kW / 225 μ s	2	1	96.5%	145 BTU / 43 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 172 mm
7070A1213	ETR10AFR	10 A / 2.3 kW / 400 μ s	2	1	96.5%	145 BTU / 43 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 172 mm
7070A1216	ETR10SAFR	10 A / 2.3 kW / 225 μ s	2	1	96.5%	145 BTU / 43 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 172 mm
7070A1221	ETR15AF	15 A / 3 kW / 400 μ s	2	1	96.5%	217 BTU / 64 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 172 mm
7070A1224	ETR15SAF	15 A / 3 kW / 200 μ s	2	1	96.5%	217 BTU / 64 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 172 mm
7070A1222	ETR15AFN	15 A / 3k W / 400 μ s	2	1	96.5%	217 BTU / 64 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 172 mm
7070A1225	ETR15SAFN	15 A / 3 kW / 225 μ s	2	1	96.5%	217 BTU / 64 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 172 mm
7070A1223	ETR15AFR	15 A / 3 kW / 400 μ s	2	1	96.5%	217 BTU / 64 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 172 mm
7070A1226	ETR15SAFR	15 A / 3 kW / 225 μ s	2	1	96.5%	217 BTU / 64 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 172 mm
7070A1231	ETR25AF	25 A / 5 kW / 400 μ s	2	1	96.5%	360 BTU / 106 W	2.5 kg / 3.3 kg	38 mm x 300 mm x 172 mm
7070A1234	ETR25SAF	25 A / 5 kW / 200 μ s	2	1	96.5%	360 BTU / 106 W	2.5 kg / 3.3 kg	38 mm x 300 mm x 172 mm
7070A1232	ETR25AFN	25 A / 5 kW / 400 μ s	2	1	96.5%	360 BTU / 106 W	2.5 kg / 3.3 kg	38 mm x 300 mm x 172 mm
7070A1235	ETR25SAFN	25 A / 5 kW / 225 μ s	2	1	96.5%	360 BTU / 106 W	2.5 kg / 3.3 kg	38 mm x 300 mm x 172 mm
7070A1233	ETR25AFR	25 A / 5 kW / 400 μ s	2	1	96.5%	360BTU / 106W	2.5 kg / 3.3 kg	38 mm x 300 mm x 172 mm
7070A1236	ETR25SAFR	25 A / 5 kW / 225 μ s	2	1	96.5%	360BTU / 106W	2.5 kg / 3.3 kg	38 mm x 300 mm x 172 mm

ESR3 DIMMER MODULE CHART (CONTINUED)

Dimmer Modules

PART NUMBER	MODEL	CURRENT/WATTAGE/ RISE TIME	CIRCUITS	RACK SLOTS	EFFICIENCY	MAX BTU/HR WATTS/ CHANNEL	WT / SHIP WT	DIMENSIONS
7070A1073	ED6	6 A / 1.3 kW / 400 μ s	2	1	97.9%	99 BTU / 29 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1081	ED6N	6 A / 1.3 kW / 400 μ s	2	1	97.9%	99 BTU / 29 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1075	ED6AF	6 A / 1.3 kW / 400 μ s	2	1	97.9%	99 BTU / 29 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1068	ED6AFN	6 A / 1.3 kW / 400 μ s	2	1	97.9%	99 BTU / 29 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1083	ED6AFR	6 A / 1.3 kW / 400 μ s	2	1	97.9%	99 BTU / 29 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1074	ED10	10 A / 2.3 kW / 400 μ s	2	1	97.2%	219 BTU / 64 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1082	ED10N	10 A / 2.3 kW / 400 μ s	1	1	97.2%	219 BTU / 64 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1076	ED10AF	10 A / 2.3 kW / 400 μ s	2	1	97.2%	219 BTU / 64 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1067	ED10AFN	10 A / 2.3 kW / 400 μ s	2	1	97.2%	219 BTU / 64 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1085	ED10AFR	10 A / 2.3 kW / 400 μ s	2	1	97.2%	219 BTU / 64 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1002	ED15	15 A / 3 kW / 225 μ s	2	1	96.1%	400 BTU / 117 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1028	ED15N	15 A / 3 kW / 225 μ s	2	1	96.1%	400 BTU / 117 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7083A1045	ED15RS	15 A / 3 kW / 225 μ s	2	1	96.1%	400 BTU / 117 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1003	ED15AF	15 A / 3 kW / 400 μ s	2	1	96.1%	400 BTU / 117 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1029	ED15AFN	15 A / 3 kW / 400 μ s	2	1	96.1%	400 BTU / 117 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1030	ED15AFR	15 A / 3 kW / 400 μ s	2	1	96.1%	400 BTU / 117 W	2.3 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1007	ED25	25 A / 5 kW / 225 μ s	2	1	95.0%	854 BTU / 250 W	2.5 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1031	ED25N	25 A / 5 kW / 225 μ s	2	1	95.0%	854 BTU / 250 W	2.5 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1008	ED25AF	25 A / 5 kW / 350 μ s	2	1	95.0%	854 BTU / 250 W	2.5 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1032	ED25AFN	25 A / 5 kW / 350 μ s	2	1	95.0%	854 BTU / 250 W	2.5 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1033	ED25AFR	25 A / 5 kW / 350 μ s	2	1	95.0%	854 BTU / 250 W	2.5 kg / 3.1 kg	38 mm x 300 mm x 127 mm
7070A1013	ED50AF	50 A / 11.4 kW / 350 μ s	1	1	96.1%	1332 BTU / 390 W	3.5 kg / 4.5 kg	38 mm x 300 mm x 127 mm
7070A1035	ED50AFR	50 A / 11.4 kW / 350 μ s	1	1	96.1%	1332 BTU / 390 W	3.5 kg / 4.5 kg	38 mm x 300 mm x 127 mm
7070A1063	ED15AFE	15 A / 3 kW / 400 μ s	2	1	>97%	<15 BTU / <6 W	3.5 kg / 4.5 kg	38 mm x 300 mm x 127 mm

ESR3 DIMMER MODULE CHART(CONTINUED)

Relay Modules

PART NUMBER	MODEL	CURRENT/WATTAGE	CIRCUITS	RACK SLOTS	EFFICIENCY	MAX BTU/HR WATTS/ CHANNEL	WT / SHIP WT	DIMENSIONS
7183A1181	ER6N	6 A / 1.3 kW	2	1	>99.0%	<10 BTU / <4 W	1.2 kg / 1.8 kg	38 mm x 300 mm x 127 mm
7183A1183	ER6	6A / 1.3kW	2	1	>99.0%	<10BTU / <4W	1.2kg / 1.8kg	38 mm x 300 mm x 127 mm
7070A1171	ER6AF	6A / 1.3kW	2	1	>99.0%	<10BTU / <4W	1.2kg / 1.8kg	38 mm x 300 mm x 127 mm
7070A1169	ER6AFN	6A / 1.3kW	2	1	>99.0%	<10BTU / <4W	1.2kg / 1.8kg	38 mm x 300 mm x 127 mm
7070A1184	ER6AFR	6A / 1.3kW	2	1	>99.0%	<10BTU / <4W	1.2kg / 1.8kg	38 mm x 300 mm x 127 mm
7183A1184	ER10	10A / 2.3kW	2	1	>99.0%	<10BTU / <4W	1.2kg / 1.8kg	38 mm x 300 mm x 127 mm
7183A1182	ER10N	10A / 2.3kW	2	1	>99.0%	<10BTU / <4W	1.2kg / 1.8kg	38 mm x 300 mm x 127 mm
7070A1172	ER10AF	10A / 2.3kW	2	1	>99.0%	<10BTU / <4W	1.2kg / 1.8kg	38 mm x 300 mm x 127 mm
7070A1170	ER10AFN	10A / 2.3kW	2	1	>99.0%	<10BTU / <4W	1.2kg / 1.8kg	38 mm x 300 mm x 127 mm
7070A1186	ER10AFR	10A / 2.3kW	2	1	>99.0%	<10BTU / <4W	1.2kg / 1.8kg	38 mm x 300 mm x 127 mm
7083A1186	ER15	15A / 3kW	2	1	>99.0%	<10BTU / <4W	1.2kg / 1.8kg	38 mm x 300 mm x 127 mm
7070A1160	ER15AF	15A / 3kW	2	1	>99.0%	<10BTU / <4W	1.2kg / 1.8kg	38 mm x 300 mm x 127 mm
7070A1152	ER15AFN	15A / 3kW	2	1	>99.0%	<10BTU / <4W	1.2kg / 1.8kg	38 mm x 300 mm x 127 mm
7070A1151	ER15AFR	15A / 3kW	2	1	>99.0%	<10BTU / <4W	1.2kg / 1.8kg	38 mm x 300 mm x 127 mm
7070A1153	ER15AFR-300	15A / 3kW	2	1	>99.0%	<10BTU / <4W	1.2kg / 1.8kg	38 mm x 300 mm x 127 mm
7083A1187	ER25	25A / 5kW	2	1	>99.0%	<10BTU / <4W	1.2kg / 1.8kg	38 mm x 300 mm x 127 mm
7070A1161	ER25AF	25A / 5kW	2	1	>99.0%	<10BTU / <4W	1.2kg / 1.8kg	38 mm x 300 mm x 127 mm
7070A1166	ER25AFR	25A / 5kW	2	1	>99.0%	<10BTU / <4W	1.2kg / 1.8kg	38 mm x 300 mm x 127 mm
7070A1162	ER15AFE	15A / 3.4kW	2	1	>99.0%	<10BTU / <4W	1.2kg / 1.8kg	38 mm x 300 mm x 127 mm

Constant Modules

PART NUMBER	MODEL	CURRENT/WATTAGE	CIRCUITS	RACK SLOTS	EFFICIENCY	MAX BTU/HR WATTS/ CHANNEL	WT / SHIP WT	DIMENSIONS
7070A1077	ECC6	6 A / 1.3 kW	2	1	>99.0%	<10 BTU / <4 W	1.1 kg / 1.6 kg	38 mm x 300 mm x 127 mm
7070A1079	ECC6N	6 A / 1.3 kW	2	1	>99.0%	<10 BTU / <4 W	1.1 kg / 1.6 kg	38 mm x 300 mm x 127 mm
7070A1078	ECC10	10 A / 2.3 kW	2	1	>99.0%	<10 BTU / <4 W	1.1 kg / 1.6 kg	38 mm x 300 mm x 127 mm
7070A1080	ECC10N	10 A / 2.3 kW	2	1	>99.0%	<10 BTU / <4 W	1.1 kg / 1.6 kg	38 mm x 300 mm x 127 mm
7070A1046	ECC15	15 A / 3 kW	2	1	>99.0%	<10 BTU / <4 W	1.1 kg / 1.6 kg	38 mm x 300 mm x 127 mm
7070A1047	ECC25	25 A / 5 kW	2	1	>99.0%	<10 BTU / <4 W	1.1 kg / 1.6 kg	38 mm x 300 mm x 127 mm

ESR3 DIMMER MODULE CHART(CONTINUED)

Low Voltage Line Dimming Modules

PART NUMBER	MODEL	CURRENT/WATTAGE	CIRCUITS	RACK SLOTS	EFFICIENCY	MAX BTU/HR WATTS/ CHANNEL	WT / SHIP WT	DIMENSIONS
7070A1426	ELED6	6A / 1.3kW	2	1	98.59%	61BTU / 18W	1.1kg / 1.6kg	38mm x 300mm x 172mm
7070A1428	ELED6N	6A / 1.3kW	2	1	98.59%	61BTU / 18W	1.1kg / 1.6kg	38mm x 300mm x 172mm
7070A1427	ELED6R	6A / 1.3kW	2	1	98.59%	61BTU / 18W	1.1kg / 1.6kg	38mm x 300mm x 172mm
7070A1300	EELV6	6A / 1.3kW	2	1	96.50%	287BTU / 84W	1.1kg / 1.6kg	38mm x 300mm x 127mm
7070A1302	EELV6AFN	6 A / 1.3 kW	2	1	96.50%	287 BTU / 84 W	1.1 kg / 1.6 kg	38 mm x 300 mm x 127 mm
7070A1303	EELV6AFR	6 A / 1.3 kW	2	1	96.50%	287 BTU / 84 W	1.1 kg / 1.6 kg	38 mm x 300 mm x 127 mm

Note: ELED6 and EELV6 modules do not support use with magnetic transformers.

Air Flow Modules

PART NUMBER	MODEL	CURRENT/WATTAGE	CIRCUITS	RACK SLOTS	EFFICIENCY	MAX BTU/HR WATTS/ CHANNEL	WT / SHIP WT	DIMENSIONS
7050A1014	AFM	-	0	1	-	-	0.7 kg /	38 mm x 300 mm x 127 mm



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