

Lineup



Note: The Controller can be used for heating/cooling control even if only 1 control output is used.

Model Number Structure

Model Number Legend

Controllers

E5AN/E5EN- M - -500

1 2 3 4 5 6 7 8 9 10 11

1. Type

H: Advanced

2. Control Mode

Blank: Standard or heating/cooling control
P: Position-proportional control

3. Control Output 1

A: Control Output Unit
R: Relay output
S: SSR output *

4. Control Output 2

A: Control Output Unit
R: Relay output
S: SSR output *

5. Auxiliary Outputs

2: Two outputs
3: Three outputs

6. Option 1

Blank: None
H: Heater burnout/SSR failure/Heater overcurrent detection (CT1)
HH: Heater burnout/SSR failure/Heater overcurrent detection (CT2)

7. Option 2

B: Two event inputs
BF: Event input + Transfer output

8. Option 3

M: Option Unit can be mounted.

9. Power Supply Voltage

Blank: 100 to 240 VAC
D: 24 VAC/VDC

10. Case Color

Blank: Black
W: Silver

11. Terminal Cover

-500: With Terminal Cover

Option Units

E53-

1

1. Function

EN01: RS-232C communications
EN02: RS-422 communications
EN03: RS-485 communications
AKB: Event input

Output Units

E53-

1 2

1. Control Output

R: Relay output
Q: Voltage output (for driving SSR)
Q3: Voltage output (for driving SSR) + 24 VDC (NPN)
Q4: Voltage output (for driving SSR) + 24 VDC (PNP)
C3: Current output + 4 to 20 mA DC
C3D: Current output + 0 to 20 mA DC
V34: Linear voltage output + 0 to 10 VDC
V35: Linear voltage output + 0 to 5 VDC

2. Version

Blank: Available for E5AN-E5EN-H.
N: Available only for E5AN-H/E5EN-H.

* Orders will not be accepted after March 31, 2018.

This data sheet is provided as a guideline for selecting products. Be sure to refer to the following user manuals for application precautions and other information required for operation before attempting to use the product.

E5CN-H/E5AN-H/E5EN-H Digital Controllers User's Manual Advanced Type (Cat. No. H157)

E5CN-H/E5AN-H/E5EN-H Digital Controllers Communications Manual Advanced Type (Cat. No. H159)

Ordering Information

E5AN-H

| Size | Case color | Power supply voltage | Control method | Auxiliary output | Control output 1/2 | Heater burnout | Optional functions | | | Model |
|--|------------|----------------------|-------------------------|-------------------------|-------------------------|-------------------|--------------------|---------------------|-----------------------|----------------------|
| | | | | | | | Event inputs | Transfer output | RSP | |
| 1/4 DIN 96 × 96 × 78 (W × H × D) | Black | 100 to 240 VAC | Basic | 2 | Control Output Unit × 2 | 1 | 2 | | 4 to 20-mA input | E5AN-HAA2HBM-500 |
| | | | | | SSR outputs × 2 | 1 | 2 | | 4 to 20-mA input | E5AN-HSS2HBM-500 * |
| | | | | Control Output Unit × 2 | 2 | 2 | 4 to 20-mA output | 4 to 20-mA input | E5AN-HAA2HHBFM-500 | |
| | | | | SSR outputs × 2 | 2 | 2 | 4 to 20-mA output | 4 to 20-mA input | E5AN-HSS2HHBFM-500 * | |
| | | | 3 | Control Output Unit × 2 | | 2 | 4 to 20-mA output | 4 to 20-mA input | E5AN-HAA3BFM-500 | |
| | | | | SSR outputs × 2 | | 2 | 4 to 20-mA output | 4 to 20-mA input | E5AN-HSS3BFM-500 * | |
| | | Valve | 2 | Relay outputs × 2 | | 2 | | 4 to 20-mA input | E5AN-HPRR2BM-500 | |
| | | | | Relay outputs × 2 | | 2 | 4 to 20-mA output | 4 to 20-mA input | E5AN-HPRR2BFM-500 | |
| | | 24 VAC/ VDC | Basic | 2 | Control Output Unit × 2 | 1 | 2 | | 4 to 20-mA input | E5AN-HAA2HBMD-500 |
| | | | | | SSR outputs × 2 | 1 | 2 | | 4 to 20-mA input | E5AN-HSS2HBMD-500 * |
| | | | | Control Output Unit × 2 | 2 | 2 | 4 to 20-mA output | 4 to 20-mA input | E5AN-HAA2HHBFMD-500 | |
| | | | | SSR outputs × 2 | 2 | 2 | 4 to 20-mA output | 4 to 20-mA input | E5AN-HSS2HHBFMD-500 * | |
| | 3 | | Control Output Unit × 2 | | 2 | 4 to 20-mA output | 4 to 20-mA input | E5AN-HAA3BFMD-500 | | |
| | | | SSR outputs × 2 | | 2 | 4 to 20-mA output | 4 to 20-mA input | E5AN-HSS3BFMD-500 * | | |
| | Valve | 2 | Relay outputs × 2 | | 2 | | 4 to 20-mA input | E5AN-HPRR2BMD-500 | | |
| | | | Relay outputs × 2 | | 2 | 4 to 20-mA output | 4 to 20-mA input | E5AN-HPRR2BFMD-500 | | |
| | Silver | 100 to 240 VAC | Basic | 2 | Control Output Unit × 2 | 1 | 2 | | 4 to 20-mA input | E5AN-HAA2HBM-W-500 |
| | | | | | Control Output Unit × 2 | 2 | 2 | 4 to 20-mA output | 4 to 20-mA input | E5AN-HAA2HHBFM-W-500 |
| Control Output Unit × 2 | | | | | 1 | 2 | | 4 to 20-mA input | E5AN-HAA2HBMD-W-500 | |
| | | 24 VAC/ VDC | | | | | | | | |

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E5EN-H

| Size | Case color | Power supply voltage | Control method | Auxiliary output | Control output 1/2 | Heater burn-out | Optional Functions | | | Model |
|--|------------|----------------------|----------------|-------------------------|-------------------------|-----------------|--------------------|-------------------|----------------------|-----------------------|
| | | | | | | | Event inputs | Transfer output | RSP | |
| 1/8 DIN 48 × 96 × 78 (W × H × D) | Black | 100 to 240 VAC | Basic | 2 | Control Output Unit × 2 | 1 | 2 | | 4 to 20-mA input | E5EN-HAA2HBM-500 |
| | | | | | SSR outputs × 2 | 1 | 2 | | 4 to 20-mA input | E5EN-HSS2HBM-500 * |
| | | | | | Control Output Unit × 2 | 2 | 2 | 4 to 20-mA output | 4 to 20-mA input | E5EN-HAA2HHBFM-500 |
| | | | | | SSR outputs × 2 | 2 | 2 | 4 to 20-mA output | 4 to 20-mA input | E5EN-HSS2HHBFM-500 * |
| | | | | | Control Output Unit × 2 | | 2 | 4 to 20-mA output | 4 to 20-mA input | E5EN-HAA3BFM-500 |
| | | | | | SSR outputs × 2 | | 2 | 4 to 20-mA output | 4 to 20-mA input | E5EN-HSS3BFM-500 * |
| | | 24 VAC/VDC | Basic | 2 | Control Output Unit × 2 | 1 | 2 | | 4 to 20-mA input | E5EN-HAA2HBMD-500 |
| | | | | | SSR outputs × 2 | 1 | 2 | | 4 to 20-mA input | E5EN-HSS2HBMD-500 * |
| | | | | | Control Output Unit × 2 | 2 | 2 | 4 to 20-mA output | 4 to 20-mA input | E5EN-HAA2HHBFMD-500 |
| | | | | | SSR outputs × 2 | 2 | 2 | 4 to 20-mA output | 4 to 20-mA input | E5EN-HSS2HHBFMD-500 * |
| | | | | | Control Output Unit × 2 | | 2 | 4 to 20-mA output | 4 to 20-mA input | E5EN-HAA3BFMD-500 |
| | | | | | SSR outputs × 2 | | 2 | 4 to 20-mA output | 4 to 20-mA input | E5EN-HSS3BFMD-500 * |
| | Silver | Basic | 2 | Relay outputs × 2 | | 2 | | 4 to 20-mA input | E5EN-HPRR2BM-500 | |
| | | | | Relay outputs × 2 | | 2 | 4 to 20-mA output | 4 to 20-mA input | E5EN-HPRR2BFM-500 | |
| | | | | Relay outputs × 2 | | 2 | | 4 to 20-mA input | E5EN-HPRR2BMD-500 | |
| | | | | Relay outputs × 2 | | 2 | 4 to 20-mA output | 4 to 20-mA input | E5EN-HPRR2BFMD-500 | |
| | | | | Control Output Unit × 2 | 1 | 2 | | 4 to 20-mA input | E5EN-HAA2HBM-W-500 | |
| | | | | Control Output Unit × 2 | 2 | 2 | 4 to 20-mA output | 4 to 20-mA input | E5EN-HAA2HHBFM-W-500 | |
| | | 24 VAC/VDC | | Control Output Unit × 2 | 1 | 2 | | 4 to 20-mA input | E5EN-HAA2HBMD-W-500 | |

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Accessories (Order Separately)

| Output unit | Model | Specifications |
|----------------------------------|----------|---|
| Relay output | E53-RN | SPST-NO, 250 VAC, 5 A (resistive load), electrical life: 100,000 operations |
| Voltage output (for driving SSR) | E53-QN | 12 VDC (PNP), max. load current: 40-mA, with short-circuit protection |
| | E53-Q3 | 24 VDC (NPN), max. load current: 20-mA, with short-circuit protection |
| | E53-Q4 | 24 VDC (PNP), max. load current: 20-mA, with short-circuit protection |
| Current output | E53-C3N | 4 to 20-mA DC, load: 600 Ω max., resolution: approx. 10,000 |
| | E53-C3DN | 0 to 20-mA DC, load: 600 Ω max., resolution: approx. 10,000 |
| Linear voltage output | E53-V34N | 0 to 10 VDC, load: 1 kΩ min., resolution: approx. 10,000 |
| | E53-V35N | 0 to 5 VDC, load: 1 kΩ min., resolution: approx. 10,000 |

USB-infrared Conversion Cable

| Model |
|-----------|
| E58-CIFIR |

USB-Serial Conversion Cable

| Model |
|-----------|
| E58-CIFQ1 |

Terminal Cover

| Connectable models | Model |
|--------------------|-----------|
| E5AN-H | E53-COV16 |
| E5EN-H | |

Note: The Terminal Cover comes with the E5CN-□□□-500 models.

Mounting Adapters

| Model |
|--------|
| Y92H-9 |

Note: These Mounting Adapters are provided with the Digital Controller.

Waterproof Packing

| Connectable models | Model |
|--------------------|---------|
| E5AN-H | Y92S-P4 |
| E5EN-H | Y92S-P5 |

Note: The Waterproof Packing is included with the Controller.

Current Transformers (CTs)

| Hole diameter | Model |
|---------------|---------|
| 5.8 dia. | E54-CT1 |
| 12.0 dia. | E54-CT3 |

CX-Thermo Support Software

| Model |
|-------------|
| EST2-2C-MV4 |