

ELECTRIFICATION SMART POWER, MAY 2019

# **Product life cycle announcement** ELIS Timers & Protective Relays: NMV, DINIL\*, SON\*, WKA\*, and R\* ranges

Subject: ELIS Timers & Protective Relays life cycle announcement

### Introduction:

In accordance with the ABB global strategy, the ELIS Timers & Protective Relays: NMV, DINIL\*, SON\*, WKA\*, and R\* types are in the limited phase of their life cycle effective immediately. These products can be replaced with ABB's electronic timers, CT range, which are available through authorized ABB distributors.

### Products:

Affected Legacy Products:

• ELIS Series NMV, DINIL\*, SON\*, WKA\*, and R\* Timers

(See Appendix A for detailed catalog numbers)

Replacement products:

ABB Monitoring Relays & Timers; CT-\* and CM-\* ranges



### Life Cycle Changes:

| Limited              | Obsolete   |
|----------------------|------------|
| Current - 06/31/2019 | 07/01/2019 |

### Life Cycle Definitions:

### CLASSIC PHASE:

- Product is still available, but not extensively promoted (a substitution product will be identified with cross-reference in most cases)
- No further enhancements or developments
- Customers can take advantages of the complete range of ABB life cycle services, spare parts and maintenance materials
- End users are encouraged to evolve to replacement product

#### LIMITED PHASE:

- Product is no longer actively promoted
- Service support is ensured, including retrofit kits, spare parts and accessories.
- Product is no longer manufactured or limited production might be available. There are reductions in stock levels and the number of SKUs that are stocked.
- Life extension solutions may be available under a Customer Support Agreement, which provide "Active Phase"-like support from ABB Service team

### **OBSOLETE PHASE:**

- Product is withdrawn from sales
- No longer manufactured as a complete product
- Retrofit kits, where applicable, are available for most applications
- Spare parts availability may diminish over time with decrease in production volumes

#### Inventory:

Inventory levels will be actively managed to reduce and eliminate the stocking levels and stocked materials.

#### Pricing:

During limited and obsolete phase, any exception to price increase must be approved by Pricing Manager and Product Marketing Manager (PMM).

SPA's will no longer be valid/offered for these products after July 1st, 2019.

#### **Product Returns:**

During the ABB life cycle phases, the ABB return policy will be enforced. Any requested returns after product obsolescence will only be accepted with approval of DSM and PMD for a grace period of 3 months from date of obsolescence.

Transition tools: eConfig tool https://xe-v-lscfe01p.xe.abb.com/global/#/

https://new.abb.com/low-voltage/products/electronicrelays/electronic-timers

https://new.abb.com/low-voltage/products/electronicrelays/monitors

Time Relays catalog https://search.abb.com/library/Download.aspx?DocumentID=2CDC111163C0201&LanguageCode=en&DocumentPar tId=PDF&Action=Launch

Measuring & Monitorng Relays catalog https://search.abb.com/library/Download.aspx?DocumentID=2CDC110004C0210\_02&LanguageCode=en&Documen tPartId=&Action=Launch

Time and Measuring/Moitoring Relays document library https://library.abb.com/en/results

BU EPPC Technical Support (for cross-reference support) eppc.support@us.abb.com

CAD drawings https://abb-control-products.partcommunity.com/3d-cad-models/?cwid=3665

### Appendix:

Appendix A – Affected Legacy Products



| Description  | Supply voltage               | Time range            | Contacts            | Ref no | Ordering co |
|--|------------------------------|-----------------------|---------------------|--------|-------------|
| Delayed-ON relay   | direct 24-240VAC/DC          | 0.06 sec6000          | 1 changeover        | 124900 | NMT         |
|  |                              | min.                  | 2 changeovers       | 124901 | NMTC        |
|  | with transformer             | 0.06 sec6000          | 1 changeover        | 124902 | NMTCVT      |
|  | 110/125V                     | min.                  |                     |        |             |
|  | with transformer<br>200/240V |                       |                     | 124903 | NMTCVTA     |
|  | with transformer             |                       |                     | 124904 | NMTCVT      |
|  | 380/440V                     |                       |                     | 124504 | NIVITEVIA   |
| Delayed ON-relay with                                    | direct 24-240VAC/DC          | 0.06 sec6000          | 1 contact timed+, 1 | 124905 | NMTO        |
| instantaneous contact                                    |                              | min.                  | contact inst.       |        |             |
| Delayed-ON relay with thyristor output timer             | direct 24-240VAC/DC          | 0.2-500 sec.          | thyristor output    | 124906 | NMTC        |
| Impulse ON timer   | direct 24-240VAC/DC          | 0.06 sec6000          | 1 changeover        | 124907 | NMI         |
|  | -                            | min.                  | <u> </u>            |        |             |
| Star-delta starter relay                                 | direct 24-240VAC/DC          | 1-60 sec.             | 2 timed             | 124908 | NME         |
|  | with transformer             |                       |                     | 124909 | NMETV       |
|  | 110/125V                     |                       |                     |        |             |
|  | with transformer             |                       |                     | 124910 | NMETVTA     |
|  | 200/240V                     |                       |                     | 124011 |             |
|  | with transformer<br>380/440V |                       |                     | 124911 | NMETVT      |
| Delayed OFF timer  | direct 24-240VAC/DC          | 0.5-6 sec.            | 1 changeover        | 124912 | NMRD        |
|  |                              | 5-60 sec.             |                     | 124913 | NMRDV       |
|  |                              | 50-600 sec.           |                     | 124914 | NMRDV-6     |
|  |                              | 0.5-6 sec.            | 2 changeovers       | 124915 | NMRDV       |
|  |                              | 5-60 sec.             |                     | 124916 | NMRDV2-     |
|  |                              | 50-600 sec.           |                     | 124917 | NMRDV2-6    |
|  | with transformer<br>110/125V | 0.5-6 sec.            | 1 changeover        | 124918 | NMRDVT-6    |
|  |                              | 5-60 sec.             |                     | 124921 | NMRDVT-60   |
|  |                              | 50-600 sec.           |                     | 124924 | NMRDVT-600  |
|  | with transformer<br>200/240V | 0.5-6 sec.            | 1 changeover        | 124919 | NMRDVT-64   |
|  |                              | 5-60 sec.             |                     | 124922 | NMRDVT-604  |
|  |                              | 50-600 sec.           |                     | 124925 | NMRDVT-600A |
|  | with transformer<br>380/440V | 0.5-6 sec.            | 1 changeover        | 124920 | NMRDVT-6    |
|  |                              | 5-60 sec.             |                     | 124923 | NMRDVT-60   |
|  |                              | 50-600 sec.           |                     | 124926 | NMRDVT-600  |
| Delayed OFF timer<br>through contact timer               | direct 24-240VAC/DC          | 0.06 sec<br>6000 min. | 1 changeover        | 124927 | NMT         |
| Symmetric intermit-<br>tence                             | direct 24-240VAC/DC          | 0.6 sec<br>6000 min.  | 1 changeover        | 124928 | NM          |
| Asymmetric intermit-<br>tence started by con-<br>nection | direct 24-240VAC/DC          | 0.6 sec<br>6000 min.  | 1 changeover        | 124929 | NMI         |
| Multifunction or pause<br>(selectable)                   | direct 24-240VAC/DC          | 0.06 sec6000<br>min.  | 1 changeover        | 124930 | NMM         |
| -  | with transformer<br>110/125V |                       |                     | 124931 | NMMFVT2/    |
| -  | with transformer<br>200/240V |                       |                     | 124932 | NMMFVT3A    |
|  | with transformer<br>380/440V |                       |                     | 124933 | NMMFVT4A    |



List Price,

GO-10RT



# **IEC Electronic Timers & Protective Relays**

Cat. no. (1)

Number of

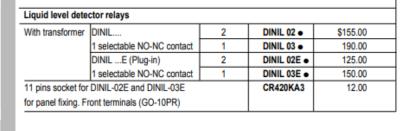
circuits

### Liquid level detectors



Supply voltage

Contacts





|     | SON |
|-----|-----|
| 0_  |     |
| 2-0 |     |

|  | Cable length | Cat. no. (1) | List Price,<br>GO-10RT |
|--|--------------|--------------|------------------------|
| Probes   |              |              |                        |
| Cable union and probe encapsulated and<br>protected by thermoplastic housing | 5 m., 16.4'  | SON-1        | \$33.00                |
| Stainless steel probe  | 10 m., 32.8' | SON-2        | 45.00                  |
| Without cable. Waterproof and protected<br>with a thermoplastic housing      | -            | SON-3        | 23.00                  |



### Ground fault



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| a Bala |

|       | RDHA |
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| 11111 |      |
| 2     |      |
| 11122 |      |

| Contacts Sensitivity |                            | Differential Trans                 | Ground Fault |                 |                       |
|----------------------|----------------------------|------------------------------------|--------------|-----------------|-----------------------|
|                      | (A)                        | Cat. no. (1) List Price<br>GO-10RT |              | Cat. no. "      | List Price<br>GO-10RT |
| Differentia          | al ground fau              | It hand reset                      |              |                 |                       |
| RDH1                 | 0.2 - 1.2 WKA 35 - 1.2A/2V |                                    | \$134.00     | RDH 1-1.2 •     | \$225.00              |
| Without              |                            | WKA 70 - 1.2A/2V                   | 188.00       |                 | 0.000                 |
| test One             |                            | WKA 105 - 1.2A/2V                  | 375.00       |                 |                       |
| selectable           |                            | WKA 140 - 1.2A/2V                  | 467.00       |                 |                       |
| NO-NC                |                            | WKA 210 - 1.2A/2V                  | 1357.00      |                 |                       |
| contact              | 1 - 10                     | WKA 35 - 10A/2V                    | 134.00       | RDH 1-10 •      | 131.00                |
|                      |                            | WKA 70 - 10A/2V                    | 188.00       |                 | 10.100                |
|                      |                            | WKA 105 - 10A/2V                   | 375.00       |                 |                       |
|                      |                            | WKA 140 - 10A/2V                   | 467.00       |                 |                       |
|                      |                            | WKA 210 - 10A/2V                   | 1357.00      |                 |                       |
| RDHT1                | 0.2 - 1.2                  | WKAT 35 - 1.2A/2V                  | 168.00       | RDHT 1-1.2 •    | 253.00                |
| With test            |                            | WKAT 70 - 1.2A/2V                  | 263.00       |                 | 100000000             |
| One                  |                            | WKAT 105 - 1.2A/2V                 | 472.00       |                 |                       |
| selectable           |                            | WKAT 140 - 1.2A/2V                 | 660.00       |                 |                       |
| NO-NC                |                            | WKAT 210 - 1.2A/2V                 | 1438.00      |                 |                       |
| contact              | 1 - 10                     | WKAT 35 - 10A/2V                   | 168.00       | RDHT 1-10 .     | 147.00                |
|                      |                            | WKAT 70 - 10A/2V                   | 263.00       |                 | 2.85545545            |
|                      |                            | WKAT 105 - 10A/2V                  | 472.00       |                 |                       |
|                      |                            | WKAT 140 - 10A/2V                  | 660.00       |                 |                       |
|                      |                            | WKAT 210 - 10A/2V                  | 1438.00      |                 |                       |
| Differentia          | al ground fau              | It with automatic reset            |              |                 |                       |
| RDHA1                | 0.2 - 1.2                  | WKAT 35 - 1.2A/2V                  | 168.00       | RDHA 1-1.2 .    | 195.00                |
| With test            |                            | WKAT 70 - 1.2A/2V                  | 263.00       | 100 I Koo 6 I K |                       |
| One                  |                            | WKAT 105 - 1.2A/2V                 | 472.00       |                 |                       |
| selectable           |                            | WKAT 140 - 1.2A/2V                 | 660.00       |                 |                       |
| NO-NC                |                            | WKAT 210 - 1.2A/2V                 | 1438.00      |                 |                       |
| contact              | 1 - 10                     | WKAT 35 - 10A/2V                   | 168.00       | RDHA 1-10 •     | 144.00                |
|                      |                            | WKAT 70 - 10A/2V                   | 263.00       |                 |                       |
|                      |                            | WKAT 105 - 10A/2V                  | 472.00       |                 |                       |
|                      |                            | WKAT 140 - 10A/2V                  | 660.00       |                 |                       |
|                      |                            | WKAT 210 - 10A/2V                  | 1438.00      |                 |                       |



Differential transformers are used in conjunction with ground fault relays. See pages 25 and 38.



# Control and protection

| a restaura | RDFF |
|------------|------|
| *********  |      |
| -0.0.0     |      |

| Supply voltage<br>contact                                    | Operating<br>U min.% | g range<br>U max.% | Unbalance %        | Mains<br>frequency | Cat. no. (1)    | List Price,<br>GO-10RT |
|--|----------------------|--------------------|--------------------|--------------------|-----------------|------------------------|
|  |                      |                    |                    |                    |                 |                        |
| Integral protect   |                      |                    |                    |                    |                 |                        |
| With<br>transformer  | 5 - 20%              | 5 - 15%            | 2.5 - 10%          | 50 Hz              | RDFF1-50 •      | \$225.00               |
| RDFF 1<br>1 selectable NO-NC                                 |                      |                    |                    | 60 Hz              | RDFF1-60 •      | 225.00                 |
| Unbalance and  | phase failu          | re protection      | on relay for three | -phase lines       |                 |                        |
| With –<br>transformer  | -                    | -                  | 2.5 - 10%          | 50 Hz              | RPDF1-50 •      | 131.00                 |
| RPDF 1   |                      |                    |                    |                    | RPDF2-50 •      | 157.00                 |
| 1 selectable NO-NC<br>RPDF 2                                 |                      |                    |                    | 60 Hz              | RPDF1-60 •      | 131.00                 |
| 2 selectable NO-NC   |                      |                    |                    |                    | RPDF2-60 •      | 157.00                 |
|  |                      |                    |                    |                    |                 |                        |
| Unbalance, pha   | ase failure a        | and minimu         | m voltage protec   | tion relay for the | hree-phase line | s                      |
| With<br>transformer<br>RDMT 1<br>1 selectable NO-NC          | 0 - 20%              | 2 - 10%            | 2.5 - 10%          | 50 Hz              | RDMT1-50 •      | 196.00                 |
| Phase sequent  | e and phas           | e failure pr       | otection relay for | three-phase li     | ines            |                        |
| With transformer   | -                    | -                  | -                  | 50 Hz              | RSFF1-50 •      | 144.00                 |
| RSFF 1<br>1 selectable NO-NC                                 |                      |                    |                    | 60 Hz              | RSFF1-60 •      | 144.00                 |
| Maximum and  | minimum              | voltage pr         | otection relay fo  | or three-phase     | lines           |                        |
| With<br>transformer  | 5 - 20%              | 5 - 15%            | -                  | -                  | RTMM 1 •        | 157.00                 |
| RTMM 1<br>1 selectable NO-NC<br>RTMM 2<br>2 selectable NO-NC |                      |                    |                    |                    | RTMM 2 •        | 165.00                 |
| Maximum and  | minimum              | voltage pr         | otection relay fo  | or single-phas     | se lines        |                        |
| With<br>transformer  | 5 - 20%              | 5 - 15%            | -                  | -                  | RMM 1 •         | 117.00                 |
| RMM 1<br>1 selectable NO-NC<br>RMM 2<br>2 selectable NO-NC   |                      |                    |                    |                    | RMM 2 •         | 125.00                 |

|       | RSF |
|-------|-----|
|       |     |
| 1.1.1 |     |
| DA (8 |     |
|       |     |
|       |     |



# Control and protection



| Voltage<br>drop | Input<br>impedance  | Max. input<br>voltage current   | Available<br>contacts  | Cat. no. (1) (2)  | List Price,<br>GO-10RT  |
|-----------------|---|---|--|---|---|
|                 |   |   |  |   |   |
| or relays       |   |   |  |   |   |
|                 | 10 kO   | 40V   |  |   | \$401.00  |
|                 | 10 152  | 400   | - 1  |   | 414.00  |
|                 | 10 40   | 60V   |  |   | 401.00  |
|                 | 10 152  | 007   | _  |   | 414.00  |
|                 | 20 kO   | 75V   |  |   | 401.00  |
|                 |   |   | _  |   | 414.00<br>401.00  |
|                 | 60 kΩ   | 110V  |  |   | 401.00  |
|                 |   |   | _  |   | 401.00  |
| -               | 250 kΩ  | 300V  |  |   | 414.00  |
|                 |   |   | -  |   | 401.00  |
| -               | 800 kΩ  | 600V  | 2  | RDT2-400V •   | 414.00  |
|                 |   |   | -  |   |   |
|                 |   |   | 1  | RDTA1-1V •  | 767.00  |
| -               | 10 kΩ   | 40V   | 2  | RDTA2-1V  | 423.00  |
|                 |   |   | 1  | RDTA1-5V  | 767.00  |
| -               | 10 kΩ   | 60V   | 2  | RDTA2-5V  | 423.00  |
|                 |   |   | 1  | RDTA1-10V   | 767.00  |
| -               | 20 kΩ   | 75V   | 2  | RDTA2-10V   | 423.00  |
|                 | 001-0   | 4401/   | -  |   | 767.00  |
| -               | 60 KΩ   | 1100  | _  |   | 423.00  |
|                 | 250 kg  | 2001/   |  |   | 767.00  |
|                 | 200 KS2   | 3007  | -  |   | 423.00  |
|                 | 800 kO  | 600V  | -  |   | 767.00  |
|                 | 000 132   | 0001  | 2  | RD1A2-400V •  | 423.00  |
| or relays       |   |   | 1  | RDI1-104 .  | 400.00  |
| 0.33V           | 0.033 Ω   | 12A   | -  |   | 415.00  |
|                 |   |   | _  |   | 400.00  |
| 0.25V           | 0.05 Ω  | 10A   | -  |   | 415.00  |
|                 |   |   | 1  | RDI1-1A •   | 400.00  |
| 0.5V            | 0.5 Ω   | 3A  | 2  | RDI2-1A •   | 415.00  |
|                 |   |   | 1  | RDI1-0.2A •   | 400.00  |
| 0.44V           | 2.2 Ω   | 1A  | 2  | RDI2-0.2A •   | 415.00  |
|                 |   |   | 1  | RDI1-0.2V •   | 400.00  |
|                 | 1 kΩ  | 15V   | 2  | RDI2-0.2V •   | 415.00  |
|                 |   |   |  |   |   |
| 0.221/          | 0.022.0   | 124   | 1  | RDIA1-10A   | 410.00  |
| 0.33V           | 0.033 12  | 124   | _  |   | 425.00  |
| 0.251/          | 0.05 O  | 104   | - 1  |   | 410.00  |
| 0.2.01          | 0.00 22   | IUA   |  |   | 425.00  |
| 0.5V            | 050   | 3A  |  |   | 410.00  |
| 0.01            | 0.0 22  | ~1  | -  |   | 425.00  |
| 0.44V           | 2.2 Ω   | 1A  |  |   | 410.00<br>425.00  |
|                 |   |   | _  |   | 425.00  |
|                 | 1 kΩ  | 15V   | 2  | RDIA2-0.2V  | 410.00  |
|                 | drop<br>ior relays<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>- | impedance           inpedance           inpedance <t< td=""><td>impedance         voltage current           ior relays         40V           -         10 kΩ         40V           -         20 kΩ         75V           -         60 kΩ         110V           -         20 kΩ         75V           -         60 kΩ         110V           -         800 kΩ         600V           -         10 kΩ         600V           -         10 kΩ         60V           -         10 kΩ         60V           -         10 kΩ         60V           -         20 kΩ         75V           -         60 kΩ         110V           -         20 kΩ         75V           -         800 kΩ         600V           -         250 kΩ         300V           -         800 kΩ         600V           -         250 kΩ         10A           0.33V         0.033 Ω         12A           0.5V         0.5Ω         3A           0.44V         2.2 Ω         1A           0.33V         0.033 Ω         12A           0.33V         0.033 Ω         12A           0.25V         0.05 Ω</td><td>impedance         voltage current         contacts           tor relays         10 kΩ         40V         1           -         10 kΩ         60V         2           -         20 kΩ         75V         1           -         20 kΩ         75V         2           -         60 kΩ         110V         2           -         60 kΩ         110V         2           -         800 kΩ         600V         2           -         10 kΩ         40V         1           -         10 kΩ         60V         2           -         20 kΩ         75V         2           -         800 kΩ         600V         2           -         800 kΩ         600V         2           -         800 kΩ         10A         2           0.33V         0.033 Ω         12A         1           0.33V         0.05 Ω         10A         2           0.5V         0.5 Ω         3A         2</td></t<> <td>drop         impedance         voltage current         contacts           tor relays         -         10 kΩ         40V         1         RDT1-1V           -         10 kΩ         60V         2         RDT2-1V           -         10 kΩ         60V         2         RDT2-1V           -         20 kΩ         75V         2         RDT2-5V           -         20 kΩ         75V         2         RDT2-10V           -         60 kΩ         110V         2         RDT2-30V           -         250 kΩ         300V         1         RDT1-12SV           -         250 kΩ         300V         2         RDT2-10V           -         10 kΩ         600V         2         RDT4-1V           -         10 kΩ         600V         2         RDT4-1V           -         10 kΩ         60V         2         RDT4-1V           -         10 kΩ         60V         2         RDT4-1V           -         10 kΩ         60V         2         RDT4-1V           -         20 kΩ         75V         1         RDT4-10V           -         20 kΩ         10V         2         RDT4-10</td> | impedance         voltage current           ior relays         40V           -         10 kΩ         40V           -         20 kΩ         75V           -         60 kΩ         110V           -         20 kΩ         75V           -         60 kΩ         110V           -         800 kΩ         600V           -         10 kΩ         600V           -         10 kΩ         60V           -         10 kΩ         60V           -         10 kΩ         60V           -         20 kΩ         75V           -         60 kΩ         110V           -         20 kΩ         75V           -         800 kΩ         600V           -         250 kΩ         300V           -         800 kΩ         600V           -         250 kΩ         10A           0.33V         0.033 Ω         12A           0.5V         0.5Ω         3A           0.44V         2.2 Ω         1A           0.33V         0.033 Ω         12A           0.33V         0.033 Ω         12A           0.25V         0.05 Ω | impedance         voltage current         contacts           tor relays         10 kΩ         40V         1           -         10 kΩ         60V         2           -         20 kΩ         75V         1           -         20 kΩ         75V         2           -         60 kΩ         110V         2           -         60 kΩ         110V         2           -         800 kΩ         600V         2           -         10 kΩ         40V         1           -         10 kΩ         60V         2           -         20 kΩ         75V         2           -         800 kΩ         600V         2           -         800 kΩ         600V         2           -         800 kΩ         10A         2           0.33V         0.033 Ω         12A         1           0.33V         0.05 Ω         10A         2           0.5V         0.5 Ω         3A         2 | drop         impedance         voltage current         contacts           tor relays         -         10 kΩ         40V         1         RDT1-1V           -         10 kΩ         60V         2         RDT2-1V           -         10 kΩ         60V         2         RDT2-1V           -         20 kΩ         75V         2         RDT2-5V           -         20 kΩ         75V         2         RDT2-10V           -         60 kΩ         110V         2         RDT2-30V           -         250 kΩ         300V         1         RDT1-12SV           -         250 kΩ         300V         2         RDT2-10V           -         10 kΩ         600V         2         RDT4-1V           -         10 kΩ         600V         2         RDT4-1V           -         10 kΩ         60V         2         RDT4-1V           -         10 kΩ         60V         2         RDT4-1V           -         10 kΩ         60V         2         RDT4-1V           -         20 kΩ         75V         1         RDT4-10V           -         20 kΩ         10V         2         RDT4-10 |





### **Control and protection**

|       | RDIT |
|-------|------|
| 11111 |      |
| 20    |      |
|       |      |
| 11111 |      |

| Operating<br>range | Voltage<br>drop | Input<br>impedance | Max. input<br>voltage current | Available<br>contacts | Cat. no. (1) (2) | List Price,<br>GO-10RT |
|--------------------|-----------------|--------------------|-------------------------------|-----------------------|------------------|------------------------|
| Current detec      | tor relays v    | vith delay (0.     | 5 - 15 s.)                    |                       |                  |                        |
|                    | 0.001/          |                    |                               | 1                     | RDIT1-10A        | \$420.00               |
| 1 - 10A            | 0.33V           | 0.033 Ω            | 12A                           | 2                     | RDIT2-10A        | 435.00                 |
|                    | 0.051/          | 0.05.0             |                               | 1                     | RDIT1-5A         | 420.00                 |
| 0.5 - 5A           | 0.25V           | 0.05 Ω             | 10A                           | 2                     | RDIT2-5A         | 435.00                 |
|                    | 0.51            |                    |                               | 1                     | RDIT1-1A         | 420.00                 |
| 0.1 - 1A           | 0.5V            | 0.5 Ω              | 3A                            | 2                     | RDIT2-1A         | 435.00                 |
|                    |                 |                    |                               | 1                     | RDIT1-0.2A       | 420.00                 |
| 20 - 200mA         | 0.44V           | 2.2 Ω              | 1A                            | 2                     | RDIT2-0.2A       | 435.00                 |
|                    |                 | 110                | 151                           | 1                     | RDIT1-0.2V       | 420.00                 |
| 20 - 200mV         |                 | 1 kΩ               | 15V                           | 1                     | RDIT2-0.2V •     | 435.00                 |
|                    |                 |                    |                               |                       |                  |                        |
| 4 404              | 0.001/          | 0.000.0            |                               | 1                     | RDITA1-10A       | 430.00                 |
| 1 - 10A 0.3        | 0.33V           | 0.033 Ω            | 12A                           | 2                     | RDITA2-10A       | 445.00                 |
|                    | 0.051/          |                    |                               | 1                     | RDITA1-5A        | 430.00                 |
| 0.5 - 5A           | 0.25V           | 0.05 Ω             | 10A                           | 2                     | RDITA2-5A        | 445.00                 |
|                    |                 |                    |                               | 1                     | RDITA1-1A        | 430.00                 |
| 0.1 - 1A           | 0.5V            | 0.5 Ω              | 3A                            | 2                     | RDITA2-1A        | 445.00                 |
|                    |                 |                    |                               | 1                     | RDITA1-0.2A      | 430.00                 |
| 20 - 200mA         | 0.44V           | 2.2 Ω              | 1A                            | 2                     | RDITA2-0.2A      | 445.00                 |
|                    |                 |                    | 1.01                          | 1                     | RDITA1-0.2V      | 430.00                 |
| 20 - 200mV         |                 | 1 kΩ               | 15V                           | 2                     | RDITA2-0.2V •    | 445.00                 |



### Control and protection



| Available<br>contacts                      | Thermal pr<br>operating ra<br>When cold | robe resistance<br>nge <sup>(2)</sup><br>When hot            | Cat. no.     | GO-10RT                              |
|--|---|--|--------------|--------------------------------------|
| Thermistor relay                           |   |  |              |                                      |
| 1 selectable NO-NC                         | 1.5 kΩ                                  | 2.5 kΩ   | RS01N •      | \$150.00                             |
| Available<br>contacts                      |   | Thermal range<br>with PT100 probe (2)                        |              | List Price,<br>GO-10RT               |
| Thermistor relay (adjustab                 | e)                                      |  |              |                                      |
| 1 selectable NO-NC                         | 30 - 60°C, 8                            | 36 - 140°F   | RSR1-30      | \$150.00                             |
|  | 55 - 85°C, 1                            |  | RSR1-55      |                                      |
|  | 80 - 110°C,                             | 176 - 230°F  | RSR1-80      | • 150.00                             |
|  | 105 - 135°C                             | 221 - 275°F  | RSR1-105     | • 150.00                             |
|  | 130 - 180°C                             | C, 266 - 356°F   | RSR1-130     | • 150.00                             |
|  |   | Catting room   | e Cat. no. 0 |                                      |
| Available<br>contacts                      | Jumper<br>terminals                     | Setting range  | e Cat. no. 1 | <sup>1)</sup> List Price,<br>GO-10RT |
| contacts                                   |   | Setting range  | e Cat. no.   |                                      |
| contacts<br>Frequency control relay        |   | 5 - 15Hz   | RCF-1 •      |                                      |
| contacts<br>Frequency control relay        | terminals                               |  |              | GO-10RT                              |
|  | Without                                 | 5 - 15Hz   |              | GO-10RT                              |
| contacts<br>Frequency control relay        | Without<br>Y1 - Y2                      | 5 - 15Hz<br>15 - 45Hz  |              | GO-10RT                              |
| contacts<br>Frequency control relay        | Without<br>Y1 - Y2<br>Y1 - Y3           | 5 - 15Hz<br>15 - 45Hz  |              | GO-10RT                              |
| Frequency control relay 1 selectable NO-NC | Without<br>Y1 - Y2<br>Y1 - Y3           | 5 - 15Hz<br>15 - 45Hz<br>45 - 135Hz<br>apacitor<br>ank Steps | RCF-1 •      | GO-10RT<br>\$230.00                  |
| contacts<br>Frequency control relay        | Without<br>Y1 - Y2<br>Y1 - Y3           | 5 - 15Hz<br>15 - 45Hz<br>45 - 135Hz<br>apacitor<br>ank Steps | RCF-1 •      | GO-10RT<br>\$230.00                  |

