

رله های کنترل فاز، ولتاژ، دما و فرکانس

مدل های پر کاربرد:

رله کنترل فاز مدل S4

| MODELS | S4 |
|--|--------------------------|
| Nominal voltage of the line to be monitored ($\pm 15\%$) | 3 x 400 V |
| Voltage supply ($\pm 15\%$) | Self-powered (3 - phase) |
| Code | 12034 |



PROTECTION FUNCTIONS

- Phase imbalance or phase loss
- Phase sequence

رله کنترل دما مدل MT2-R

| MODELS | MT2-R | OD-MT |
|-------------------------------|-----------------------|-------|
| Voltage supply ($\pm 15\%$) | 230 Vac (Aux. supply) | - |
| Code | 12048 | 12560 |



PROTECTION FUNCTIONS

- Overtemperature
- Thermistor short-circuit

رله کنترل ولتاژ تکفاز مدل U1D

| MODELS | U1D-24D | U1D-115 | U1D-230 |
|--------------------------|---------|----------|----------|
| Frequency | DC | 50/60 Hz | 50/60 Hz |
| Maximum threshold V / Hz | V / Hz | 105-135 | 215-275 |
| Minimum threshold V / Hz | V / Hz | 90-120 | 160-230 |
| Code | 12028 | 12026 | 12027 |



PROTECTION FUNCTIONS

- $U >$ Overvoltage
- $U <$ Undervoltage

رله کنترل فاز و ولتاژ مدل U3

| MODELS | U3S-230 | U3S-420 | U3P-230 | U3P-400 | U3P-440 |
|--------------------------|----------|----------|----------|----------|----------|
| Frequency | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz |
| Maximum threshold V / Hz | 210-290 | 380-500 | 230-260 | 400-460 | 440-500 |
| Minimum threshold V / Hz | 185-230 | 350-430 | 200-230 | 340-400 | 380-440 |
| Code | 12071 | 12070 | 12066 | 12065 | 12067 |



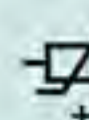

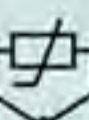




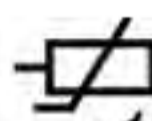


PROTECTION FUNCTIONS

- $U >$ Overvoltage
- $U <$ Undervoltage
- Phase imbalance or phase loss
- Phase sequence

Model U3 N includes:

- Loss of neutral

| MODELS | NOMINAL VOLTAGE | Auxiliary Supply | RANGE |  |  |  |  |  | $U>$ | $U<$ | I_N | $\frac{Hz>}{Hz<}$ |
|---------|-----------------|---------------------------|----------------------------------|---|---|---|---|---|------|------|-------|-------------------|
| S2 | 3 x 230 Vac | Self-powered (3 - phase) | | • | • | | | | | | | |
| S4 | 3 x 400 Vac | Self-powered (3 - phase) | | • | • | | | | | | | |
| ST2 | 3 x 230 Vac | Self-powered (3 - phase) | | • | • | • | | | | | | |
| ST4 | 3 x 400 Vac | Self-powered (3 - phase) | | • | • | • | | | | | | |
| ST2-D | 3 x 230 Vac | Self-powered (3 - phase) | | • | • | • | | | | | | |
| ST4-D | 3 x 400 Vac | Self-powered (3 - phase) | | • | • | • | | | | | | |
| T2 | 230 Vca | 230 Vac(Aux) | -5° C / +5° C -40° C / +55° C | | | • | | | | | | |
| T2 | 24 Vac-dc | 24 Vac, dc(Aux) | -5° C / +5° C -40° C / +55° C | | | • | | | | | | |
| TST-24 | 24 Vac-dc | 24 Vac, dc(Aux) | -5° C / +5° C -40° C / +55° C | • | • | • | • | | | | | |
| MT2 | 230 Vac | 230 Vac (Aux, supply) | | | | • | | • | | | | |
| MT2-R | 230 Vac | 230 Vac (Aux, supply) | | | | • | | • | | | | |
| U1D-24D | 24 Vdc | Self-powered | 19 - 28 | | | | | | • | • | | |
| U1D-115 | 115 Vac | Self-powered | 90 - 135 | | | | | | • | • | | |
| U1D-230 | 230 Vac | Self-powered | 160 - 275 | | | | | | • | • | | |
| U1M-24D | 24 Vdc | Self-powered | 19 - 28 | | | | | | • | • | | |
| U1M-115 | 115 Vac | Self-powered | 90 - 135 | | | | | | • | • | | |
| U1M-230 | 230 Vac | Self-powered | 160 - 275 | | | | | | • | • | | |
| U3S-230 | 230 Vac | Self-powered | 185 - 290 | • | • | | | | • | • | | |
| U3S-420 | 420 Vac | Self-powered | 350 - 500 | • | • | | | | • | • | | |
| U3P-230 | 230 Vac | Self-powered | 200 - 260 | • | • | | | | • | • | | |
| U3P-400 | 400 Vac | Self-powered | 340 - 460 | • | • | | | | • | • | | |
| U3P-440 | 440 Vac | Self-powered | 380 - 500 | • | • | | | | • | • | | |
| U3N-230 | 230 Vac | Self-powered | 200 - 260 | • | • | | | | • | • | • | |
| U3N-400 | 400 Vac | Self-powered | 340 - 460 | • | • | | | | • | • | • | |
| U3N-440 | 440 Vac | Self-powered | 380 - 500 | • | • | | | | • | • | • | |
| H | 115 Vac | Self-powered single phase | 50/60 ± 3,5 Hz | | | | | | | | | • |
| H | 230 Vac | Self-powered single phase | 50/60 ± 3,5 Hz | | | | | | | | | • |

| | | | | | | | | | | |
|------------------|----------------------|-----------------------------|--|---|--|--|--------------------------|--|---|--|
| $I>$ Overload | $I<$ Undercurrent | $\cos \varphi$ Underload |  Phase loss Phase imbalance |  Phase sequence |  Overtemperature | $\frac{U>}{U<}$ Overvoltage / Undervoltage | I_N Loss of neutral | $\frac{Hz>}{Hz<}$ Overfrequency / Underfrequency |  Max / Min temperature |  Thermistor short-circuit |
|------------------|----------------------|-----------------------------|--|---|--|--|--------------------------|--|---|--|