

# 21/136 Series - Transfer Relays

## DPDT, 30 Amps

**NEMA TS2  
Approved**

The 21 and 136 series flash transfer relays have a proven industry record of reliability. Their rugged design has allowed the products to be plugged in and left, for years of service.

### GENERAL SPECIFICATIONS (@ 25° C)

| <b>Contacts:</b>            | <b>21 Series</b>         | <b>136 Series</b>        |
|-----------------------------|--------------------------|--------------------------|
| Contact Configuration       | DPDT                     | DPDT                     |
| Contact Material            | Silver Alloy             | Silver Alloy             |
| Contact Rating              |                          |                          |
| 120 / 240VAC Resistive      | 30 Amp                   | 30 Amp                   |
| 28VDC Resistive             | 20 Amp                   | 20 Amp                   |
| Motor 120VAC 1 Phase        | 1 1/2Hp                  | 1/4Hp                    |
| Motor 240VAC 3 Phase        | 2Hp                      | -                        |
| 120VAC Tungsten             | 20 Amp                   | 20 Amp                   |
| Contact Resistance, Initial | 100 milliohms max @ 6VDC | 100 milliohms max @ 6VDC |

| <b>Coil:</b>                 |                        |                        |
|------------------------------|------------------------|------------------------|
| Coils Available              | AC and DC              | AC                     |
| Nominal Coil Power           | 2.4VA                  | 6VA                    |
| Input Voltage Tolerance - AC | 75% to 110% of nominal | 85% to 110% of nominal |
| Input Voltage Tolerance - DC | 70% to 110% of nominal | 75% to 110% of nominal |
| Drop-out voltage             | 10% of nominal         | 10% of nominal         |
| Duty                         | Continuous             | Continuous             |

| <b>Timing:</b>     |       |       |
|--------------------|-------|-------|
| Operate Time (max) | 20 mS | 20 mS |
| Release Time (max) | 20 mS | 20 mS |

| <b>Dielectric Strength:</b>      |                          |                          |
|----------------------------------|--------------------------|--------------------------|
| Across Open Contacts             | 600Vrms                  | 600Vrms                  |
| Between mutually insulated point | 1500Vrms                 | 1500Vrms                 |
| Insulation resistance            | 1,000 Mohms min @ 500VDC | 1,000 Mohms min @ 500VDC |

| <b>Temperature:</b> |                             |                             |
|---------------------|-----------------------------|-----------------------------|
| Operating           | -34 to 74°C (-30 to 165°F)  | -34 to 74°C (-30 to 165°F)  |
| Storage             | -40 to 105°C (-40 to 221°F) | -40 to 105°C (-40 to 221°F) |

| <b>Life Expectancy:</b> |           |           |
|-------------------------|-----------|-----------|
| Electrical (full load)  | 200,000   | 100,000   |
| Mechanical (no load)    | 5,000,000 | 5,000,000 |

| <b>Miscellaneous:</b> |                     |                     |
|-----------------------|---------------------|---------------------|
| Mounting Position     | Any                 | Any                 |
| Enclosure             | Clear Polycarbonate | Clear Polycarbonate |
| Weight                | 7.2oz (205 grams)   | 8.1oz (230 grams)   |
| Mating Socket         | SK-TRF8-BFW-1       | SK-TRF8-BFW-1       |

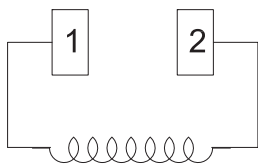
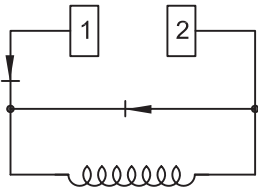
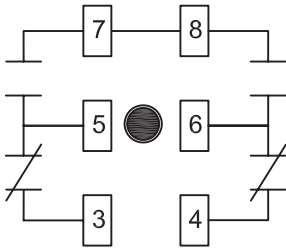


The 21 series coil is rectified which provides chatter free operation in brownout conditions down to 85VAC and will not overheat up to 130VAC. Rectified coils also provide less power consumption and less heating.

The 136 Series is a straight AC operated coil with a copper shading ring instead of a rectified coil.

# General Purpose Relays

## Wire Diagram



DC COIL

Newly Available

Ordering Code **21** **XBX** **P** **120VAC**

Series  
21

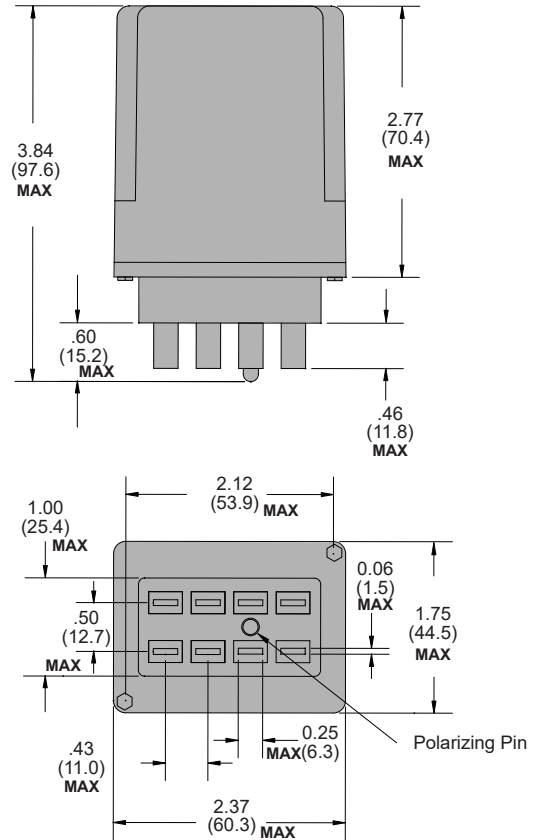
Contact Arrangement  
XBX - (2 form C - DPDT)

Optional Features  
Polycarbonate cover - CODE P  
Light Pipe for coil voltage indicator - CODE L

Coil Voltage  
AC: 120, 240 (Add VAC)  
DC: 12, 24 (Add VDC)  
Coil voltages and frequencies must be specified

## Outline Dimensions

Dimensions Shown in inches & (millimeters)



## 21 Legacy Part Number Chart

| NEMA Approved Part numbers | Current Product Marking |
|----------------------------|-------------------------|
| W21ACPXD-5                 | 21ACPX-2/21XBXP-120VAC  |
| W21ACPXD-6                 | 21ACPX-8/21XBXP-240VAC  |

May also order

| Part numbers/Midtex Type | Voltage |
|--------------------------|---------|
| 136-62T3A1               | 120VAC  |

| Coils Available            | AC and DC              |
|----------------------------|------------------------|
| Nominal Coil Power         | 2.4VA                  |
| Input Voltage Tolerance AC | 75% to 110% of nominal |
| Input Voltage Tolerance DC | 70% to 110% of nominal |
| Drop Out Voltage           | 10% of nominal         |
| Duty                       | Continuous             |