

RIB® Emergency Lighting and Power Equipment Relays



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UL924 Emergency Lighting and Power Equipment



Bulletin B990

393084N

IMPORTANT SAFEGUARD: INSULATE UNUSED LEADS INDIVIDUALLY

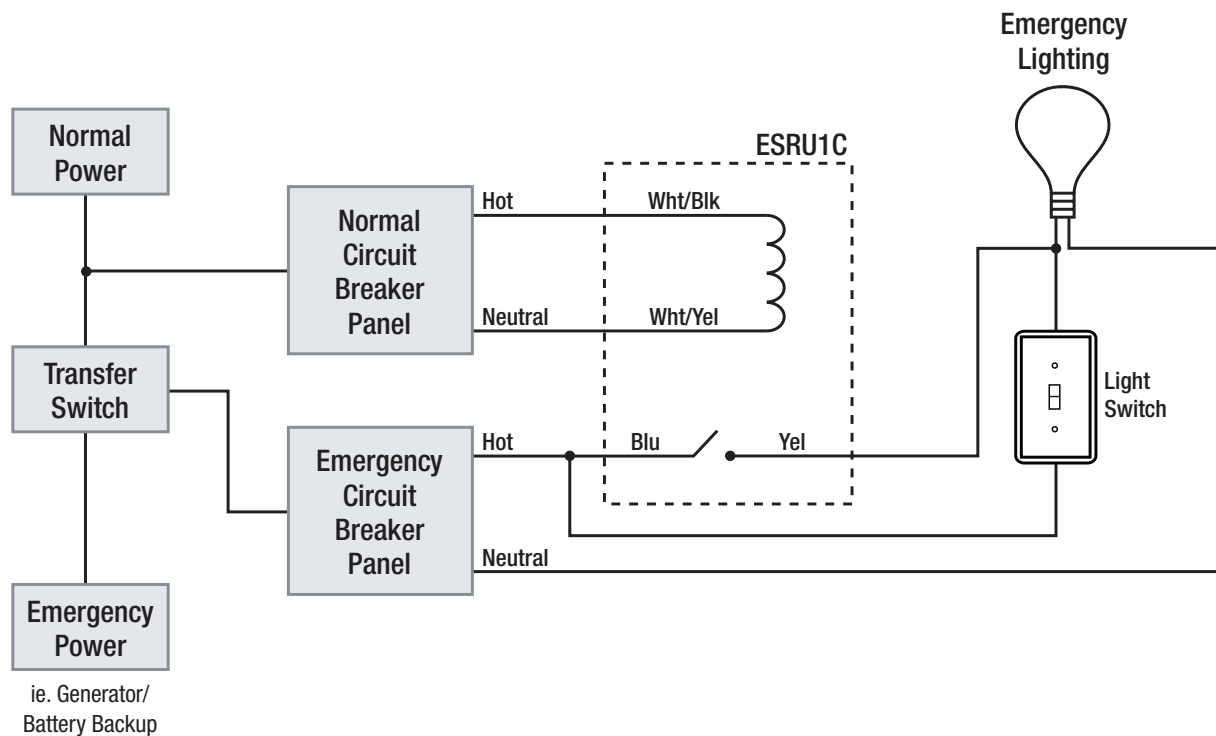
When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Do not mount near gas or electric heaters.
3. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
4. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
5. Do not use equipment for other than intended use.
6. Servicing of this equipment should be performed by a qualified service personnel.

SAVE THESE INSTRUCTIONS.

Example Wiring for ESRU1C



ESRU1C*

COIL INPUT RATINGS
 10-30Vdc @ 18 mA max or
 10-30 Vac, 50-60Hz @ 50mA max
 120 Vac, 50-60Hz @ 25mA

CONTACT RATINGS
 10A Res. @ 277 Vac or 28 Vdc
 480 VA @ 240/277 Vac Pilot
 480 VA @ 277 Vac Ballast
 600 W Tungsten @ 120 Vac N/O
 240 W Tungsten @ 120 Vac N/C
 TV-5 @ 120 Vac N/O
 TV-2 @ 120 Vac N/C
 1/3 HP @ 120/240 Vac N/O
 1/4 HP @ 277 Vac N/O
 1/6 HP @ 120/240 Vac N/C
 1/8 HP @ 277 Vac N/C

Wht/Blk 120 Vac
 Wht/Blu 10-30 Vac/dc
 Wht/Yel Comm
 Blu N/C
 Yel Comm
 Org N/O

ESRH1C*

COIL INPUT RATINGS
 10-30Vdc @ 18 mA max or
 10-30 Vac, 50-60Hz @ 50mA max
 208-277 Vac, 50-60Hz @ 35mA

CONTACT RATINGS
 10A Res. @ 277 Vac or 28 Vdc
 480 VA @ 240/277 Vac Pilot
 480 VA @ 277 Vac Ballast
 600 W Tungsten @ 120 Vac N/O
 240 W Tungsten @ 120 Vac N/C
 TV-5 @ 120 Vac N/O
 TV-2 @ 120 Vac N/C
 1/3 HP @ 120/240 Vac N/O
 1/4 HP @ 277 Vac N/O
 1/6 HP @ 120/240 Vac N/C
 1/8 HP @ 277 Vac N/C

Wht/Brn 208-277 Vac
 Wht/Blu 10-30 Vac/dc
 Wht/Yel Comm
 Blu N/C
 Yel Comm
 Org N/O

ESR2401B^

COIL INPUT RATINGS
 24 Vdc @ 32 mA max
 30 Vdc @ 42 mA max
 24 Vac @ 75 mA max
 120 Vac @ 42 mA max

CONTACT RATINGS
 20 A Resistive, 277 Vac
 20 A Ballast N/C, 120/277 Vac
 10 A Ballast N/C, 120/277 Vac
 10 A Tungsten N/O, 120 Vac
 2 A Tungsten N/C, 120 Vac
 1 HP, 120 Vac
 2 HP, 277 Vac
 770VA Pilot Duty, 120Vac
 1110VA Pilot Duty, 277Vac

Wht/Blk 120 Vac
 Wht/Blu 24 Vac/dc
 Wht/Yel Comm
 Blu N/C
 Yel Comm
 Org N/O

ESRU1S-NC*(1)

COIL INPUT RATINGS
 10-30Vdc @ 18 mA max or
 10-30 Vac, 50-60Hz @ 50mA max
 120 Vac, 50-60Hz @ 25mA

CONTACT RATINGS
 10A Res., 277 Vac
 240 W N/C Tungsten, 120 Vac
 1/6 HP N/C, 120/240 Vac
 1/8 HP N/C, 277 Vac
 480 VA Ballast, 277 Vac
 480 VA Pilot Duty, 277 Vac

Wht/Blk 120 Vac
 Wht/Blu 10-30 Vac/dc
 Wht/Yel Comm
 CLOSED AUTO
 Org
 Org

ESRH1S-NC*(1)

COIL INPUT RATINGS
 10-30Vdc @ 18 mA max or
 10-30 Vac, 50-60Hz @ 50mA max
 208-277 Vac, 50-60Hz @ 35mA

CONTACT RATINGS
 10A Res., 277 Vac
 240 W N/C Tungsten, 120 Vac
 1/6 HP N/C, 120/240 Vac
 1/8 HP N/C, 277 Vac
 480 VA Ballast, 277 Vac
 480 VA Pilot Duty, 277 Vac

Wht/Brn 208-277 Vac
 Wht/Blu 10-30 Vac/dc
 Wht/Yel Comm
 CLOSED AUTO
 Org
 Org

ESR2401SB-NC^(1)

COIL INPUT RATINGS
 24 Vdc @ 32 mA max
 30 Vdc @ 42 mA max
 24 Vac @ 75 mA max
 120 Vac @ 42 mA max

CONTACT RATINGS
 20 A Resistive, 277 Vac
 10 A Ballast N/C, 120/277 Vac
 2 A Tungsten N/C, 120 Vac
 1 HP, 120 Vac
 2 HP, 277 Vac
 770VA Pilot Duty, 120Vac
 1110VA Pilot Duty, 277Vac

Wht/Blk 120 Vac
 Wht/Blu 24 Vac/dc
 Wht/Yel Comm
 CLOSED AUTO
 Org
 Org

ESR2402B^

COIL INPUT RATINGS
 24 Vdc @ 32 mA max
 30 Vdc @ 42 mA max
 24 Vac @ 75 mA max
 208-277 Vac @ 62 mA max

CONTACT RATINGS
 20 A Resistive, 277 Vac
 20 A Ballast N/O, 120/277 Vac
 10 A Ballast N/C, 120/277 Vac
 10 A Tungsten N/O, 120 Vac
 2 A Tungsten N/C, 120 Vac
 1 HP, 120 Vac
 2 HP, 277 Vac
 770VA Pilot Duty, 120Vac
 1110VA Pilot Duty, 277Vac

Wht/Brn 208-277 Vac
 Wht/Blu 24 Vac/dc
 Wht/Yel Comm
 Blu N/C
 Yel Comm
 Org N/O

ESRMU1C*

COIL RATINGS
 10-30Vdc @ 18mA max or
 10-30Vac, 60Hz @ 50mA max
 120Vac, 60Hz @ 25mA

CONTACT RATINGS
 15A Res., 28 Vdc or 150 Vac
 10A Res., 120/240/277 Vac
 480 VA Pilot Duty, 240/277 Vac
 480 VA Ballast, 277 Vac
 600 W Tungsten N/C, 120 Vac
 240 W Tungsten N/C, 120 Vac
 1/3 HP Motor N/O, 120/240 Vac
 1/4 HP Motor N/O, 277 Vac
 1/6 HP Motor N/C, 120/240 Vac
 1/8 HP Motor N/C, 277 Vac

Comm
 10-30 Vac/dc
 120 Vac
 N/C
 Comm
 N/O

ESRM2402B^

COIL INPUT RATINGS
 24 Vdc @ 32 mA max
 30 Vdc @ 42 mA max
 24 Vac @ 75 mA max
 208-277 Vac @ 62 mA max

CONTACT RATINGS
 20 A Resistive, 277 Vac
 20 A Ballast N/O, 120/277 Vac
 10 A Tungsten N/C, 120 Vac
 2 A Tungsten N/C, 120 Vac
 1 HP, 120 Vac
 2 HP, 277 Vac
 770VA Pilot Duty, 120Vac
 1110VA Pilot Duty, 277Vac

Comm
 24 Vac/dc
 208-277 Vac
 Comm
 N/O
 N/C

ESR2402SB-NC^(1)

COIL INPUT RATINGS
 24 Vdc @ 32 mA max
 30 Vdc @ 42 mA max
 24 Vac @ 75 mA max
 208-277 Vac @ 62 mA max

CONTACT RATINGS
 20 A Resistive, 277 Vac
 10 A Ballast N/C, 120/277 Vac
 2 A Tungsten N/C, 120 Vac
 1 HP, 120 Vac
 2 HP, 277 Vac
 770VA Pilot Duty, 120Vac
 1110VA Pilot Duty, 277Vac

Wht/Brn 208-277 Vac
 Wht/Blu 24 Vac/dc
 Wht/Yel Comm
 CLOSED AUTO
 Org
 Org

ESRMNU1C*

COIL RATINGS
 10-30Vdc @ 18mA max or
 10-30Vac, 60Hz @ 50mA max
 120Vac, 60Hz @ 25mA

CONTACT RATINGS
 15A Res., 28 Vdc or 150 Vac
 10A Res., 120/240/277 Vac
 480 VA Pilot Duty, 240/277 Vac
 480 VA Ballast, 277 Vac
 600 W Tungsten N/C, 120 Vac
 240 W Tungsten N/C, 120 Vac
 1/3 HP Motor N/O, 120/240 Vac
 1/4 HP Motor N/O, 277 Vac
 1/6 HP Motor N/C, 120/240 Vac
 1/8 HP Motor N/C, 277 Vac

Comm
 10-30 Vac/dc
 120 Vac
 N/C
 Comm
 N/O

ESRM2402SB^

COIL INPUT RATINGS
 24 Vdc @ 32 mA max
 30 Vdc @ 42 mA max
 24 Vac @ 75 mA max
 208-277 Vac @ 62 mA max

CONTACT RATINGS
 20 A Resistive, 277 Vac
 20 A Ballast N/O, 120/277 Vac
 10 A Tungsten N/C, 120 Vac
 2 A Tungsten N/C, 120 Vac
 1 HP, 120 Vac
 2 HP, 277 Vac
 770VA Pilot Duty, 120Vac
 1110VA Pilot Duty, 277Vac

Comm
 24 Vac/dc
 208-277 Vac
 Selectable Jumper Wire
 CLOSED AUTO
 Not Used

ESR2401D*

COIL INPUT RATINGS
 22 mA @ 24 Vdc
 29 mA @ 24 Vac, 50-60Hz
 28 mA @ 120 Vac, 50-60Hz

CONTACT RATINGS
 10A General Use, 277 Vac
 10A Resistive, 30Vdc
 1/2 HP @ 120/240Vac, N.O.
 1/3 HP @ 120/240Vac, N.C.
 B300 Pilot Duty

Wht/Blk 120 Vac
 Wht/Blu 24 Vac/dc
 Wht/Yel Comm
 Blu N/C
 Yel Comm
 Org N/O
 Gry N/C
 Prp Comm
 Brn N/O

ESR01P^

COIL INPUT RATINGS
 120 Vac, 95 mA

CONTACT RATINGS
 20 Amp Resistive @ 300 Vac
 20 Amp Resistive @ 28 Vdc
 20 Amp Ballast @ 277-480 Vac
 15 Amp Resistive @ 600 Vac
 770 VA Pilot Duty @ 120 Vac
 1158 VA Pilot Duty @ 240 Vac
 1110 VA Pilot Duty @ 277 Vac
 1640 VA Pilot Duty @ 480 Vac
 3 HP @ 480-600 Vac
 2 HP @ 240-277 Vac
 1 HP @ 120 Vac

Wht/Blk 120 Vac
 Wht/Blk 120 Vac
 Blu N/C
 Yel Comm
 Org N/O
 Gry N/C
 Prp Comm
 Brn N/O

ESR24P^

COIL INPUT RATINGS
 24 Vdc @ 125 mA max or
 24-30 Vdc @ 70 mA max

CONTACT RATINGS
 20A Res. @ 28 Vdc
 20A Res. @ 300 Vac
 15A Res. @ 600 Vac
 20A Ballast @ 277/480 Vac
 1 HP @ 120 Vac
 2 HP @ 240/277 Vac
 3 HP @ 480/600 Vac
 770VA Pilot 120 Vac
 1158VA Pilot @ 240 Vac
 1109VA Pilot @ 277 Vac
 1640VA Pilot @ 480 Vac
 600 Vac Heavy Pilot Duty

Wht/Yel 24 Vac/dc
 Wht/Yel 24 Vac/dc
 Blu N/C
 Yel Comm
 Org N/O
 Gry N/C
 Prp Comm
 Brn N/O

ESR2402D*

COIL INPUT RATINGS
 22 mA @ 24 Vdc
 29 mA @ 24 Vac, 50-60Hz
 32 mA @ 208-277 Vac, 50-60Hz

CONTACT RATINGS
 10A General Use, 277 Vac
 10A Resistive, 30Vdc
 1/2 HP @ 120/240Vac, N/O
 1/3 HP @ 120/240Vac, N/C
 B300 Pilot Duty

Wht/Brn 208-277 Vac
 Wht/Blu 24 Vac/dc
 Wht/Yel Comm
 Blu N/C
 Yel Comm
 Org N/O
 Gry N/C
 Prp Comm
 Brn N/O

ESR02P^

COIL INPUT RATINGS
 208-277 Vac, 95 mA

CONTACT RATINGS
 20 Amp Resistive @ 300 Vac
 20 Amp Resistive @ 28 Vdc
 20 Amp Ballast @ 277-480 Vac
 15 Amp Resistive @ 600 Vac
 770 VA Pilot Duty @ 120 Vac
 1158 VA Pilot Duty @ 240 Vac
 1110 VA Pilot Duty @ 277 Vac
 1640 VA Pilot Duty @ 480 Vac
 3 HP @ 480-600 Vac
 2 HP @ 240-277 Vac
 1 HP @ 120 Vac

Wht/Brn 208-277 Vac
 Wht/Brn 208-277 Vac
 Blu N/C
 Yel Comm
 Org N/O
 Gry N/C
 Prp Comm
 Brn N/O

ESRTE01P^

CONTROL INPUT RATINGS
 4 mA @ 5Vdc
 9 mA @ 10Vdc
 1 mA @ 12Vdc
 1 mA @ 24Vdc
 3 mA @ 24 Vac
 (NON POLARIZED)

CONTACT RATINGS
 20 Amp Res @ 28 Vdc
 20 Amp Res @ 300 Vac
 15 Amp Res @ 600 Vac
 1 HP @ 120 Vac
 2 HP @ 240/277 Vac
 3 HP @ 480/600 Vac
 20 Amp ballast @ 277/480 Vac
 A600 Pilot Duty

Wht/Blk 120Vac POWER INPUT
 Wht/Blk
 5-25Vac/dc CONTROL INPUT
 Comm
 Blu N/C
 Yel Comm
 Org N/O
 Gry N/C
 Prp Comm
 Brn N/O

ESRTE02P^

CONTROL INPUT RATINGS
 4 mA @ 5Vdc
 9 mA @ 10Vdc
 1 mA @ 12Vdc
 2 mA @ 24Vdc
 3 mA @ 24 Vac
 (NON POLARIZED)

CONTACT RATINGS
 20 Amp Res @ 28 Vdc
 20 Amp Res @ 300 Vac
 15 Amp Res @ 600 Vac
 1 HP @ 120 Vac
 2 HP @ 240/277 Vac
 3 HP @ 480/600 Vac
 20 Amp ballast @ 277/480 Vac
 A600 Pilot Duty

Wht/Brn 208-277Vac POWER INPUT
 Wht/Brn
 5-25Vac/dc CONTROL INPUT
 Comm
 Blu N/C
 Yel Comm
 Org N/O
 Gry N/C
 Prp Comm
 Brn N/O

ESRU2C*

CONTACT RATINGS
 10A Res. @ 277 Vac or 28 Vdc
 480 VA @ 240/277 Vac Pilot
 480 VA @ 277 Vac Ballast
 600 W Tungsten @ 120 Vac N/O
 240 W Tungsten @ 120 Vac N/C
 1/3 HP @ 120/240 Vac N/O
 1/4 HP @ 277 Vac N/O
 1/6 HP @ 120/240 Vac N/C
 1/8 HP @ 277 Vac N/C

COIL INPUT RATINGS
 20 mA @ 10-30 Vdc
 55 mA @ 10-30 Vac, 60 Hz
 28 mA @ 120 Vac, 60 Hz

Wht/Blk 120 Vac
 Wht/Blu 10-30 Vac/dc
 Wht/Yel Comm
 Wht/Red 120 Vac
 Gry/Wht 10-30 Vac/dc
 Wht/Purp Comm
 Blu N/C
 Yel Comm
 Org N/O
 Gry N/C
 Purp Comm
 Brn N/O

ESRH2C*

CONTACT RATINGS
 10A Res. @ 277 Vac or 28 Vdc
 480 VA @ 240/277 Vac Pilot
 480 VA @ 277 Vac Ballast
 600 W Tungsten @ 120 Vac N/O
 240 W Tungsten @ 120 Vac N/C
 1/3 HP @ 120/240 Vac N/O
 1/4 HP @ 277 Vac N/O
 1/6 HP @ 120/240 Vac N/C
 1/8 HP @ 277 Vac N/C

COIL INPUT RATINGS
 20 mA @ 10-30 Vdc
 55 mA @ 10-30 Vac, 60 Hz
 39 mA @ 208-277 Vac, 60 Hz

Wht/Brn 208-277 Vac
 Wht/Blu 10-30 Vac/dc
 Wht/Yel Comm
 Wht/Org 208-277 Vac
 Gry/Wht 10-30 Vac/dc
 Wht/Purp Comm
 Blu N/C
 Yel Comm
 Org N/O
 Gry N/C
 Purp Comm
 Brn N/O

ESRM2401D*

COIL INPUT RATINGS
 36 mA @ 30Vdc
 40 mA @ 30Vac
 31 mA @ 120Vac

CONTACT RATINGS
 10A General Use, 277 Vac
 10A Resistive, 30Vdc
 1/2 HP @ 120/240Vac, N.O.
 1/3 HP @ 120/240Vac, N.C.
 B300 Pilot Duty

120 Vac
 24 Vac/dc
 Comm
 N/O
 Comm
 N/C
 N/O
 Comm
 N/C

*FOR SUPPLY CONNECTIONS USE #14AWG WIRES OR LARGER RATED FOR AT LEAST 75°C(167°F).
 ^FOR SUPPLY CONNECTIONS USE #12AWG WIRES OR LARGER RATED FOR AT LEAST 75°C(167°F).

^(1) Standard model has N/C contact configuration, if -NC present. N/O contact configuration, if -NC not present. Refer to Label on -MNC & N/O models for wiring.