



| Product designation Product type designation | | | Power contactor BF330 |
|--|--------------------|-----|--------------------------|
| Contact characteristics | | | DI 330 |
| Number of poles | | Nr. | 4 |
| Rated insulation voltage Ui IEC/EN | | V | 1000 |
| Rated impulse withstand voltage Uimp | | kV | 8 |
| Operational frequency | | | |
| | min | Hz | 25 |
| | max | Hz | 400 |
| IEC Conventional free air thermal current Ith | | Α | 500 |
| Operational current le | | | |
| | AC-1 (≤40°C) | А | 500 |
| | AC-1 (≤55°C) | А | 415 |
| | AC-1 (≤70°C) | А | 360 |
| | AC-3 (≤440V ≤55°C) | А | 330 |
| | AC-4 (400V) | А | 160 |
| Rated operational power AC-3 (T≤55°C) | | | |
| | 230V | kW | 90 |
| | 400V | kW | 160 |
| | 415V | kW | 160 |
| | 440V | kW | 160 |
| | 500V | kW | 200 |
| | 690V | kW | 250 |
| | 1000V | kW | 185 |
| Rated operational current AC-3 (T≤55°C) | | | |
| | 230V | А | 330 |
| | 400V | А | 330 |
| | 415V | А | 330 |
| | 440V | А | 330 |
| | 500V | А | 300 |
| | 690V | А | 300 |
| | 1000V | А | 140 |
| Rated operational power AC-1 (T≤40°C) | | | |
| | 230V | kW | 189 |
| | 400V | kW | 329 |
| | 500V | kW | 362 |
| | 690V | kW | 568 |
| IEC max current le in DC1 with $L/R \le 1$ ms with 1 poles in series | | | |
| | 75V | А | 375 |
| | 110V | А | 195 |
| IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series | | | |
| | 75V | А | 375 |
| | 110V | А | 350 |
| | 220V | А | 300 |

IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series



FOUR-POL IL, DC

| | BF330T4E024 |
|--|-------------------------|
| LE CONTACTOR, IEC OPERATING CURRENT ITH (A | C1) = 500A, AC/DC COIL, |
| | 2460VAC - 2060VDC |

| | 75V | А | 375 |
|---|-----------|--------------|---------------|
| | 110V | А | 350 |
| | 220V | А | 350 |
| | 330V | Α | 300 |
| IEC max current le in DC1 with $L/R \le 1$ ms with 4 poles in series | | | |
| | 75V | А | 375 |
| | 110V | А | 350 |
| | 220V | А | 350 |
| IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 1 poles in series | | | |
| | 75V | А | 310 |
| | 110V | А | 170 |
| IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 2 poles in series | | | - |
| | 75V | А | 310 |
| | 110V | A | 290 |
| | 220V | A | 230 |
| IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 3 poles in series | 2201 | Λ | 200 |
| IEC max current le in DC3-DC3 with E/K = 15ms with 5 poles in series | 75V | А | 310 |
| | 110V | | |
| | 220V | A | 310 |
| | | A | 290 |
| | 330V | A | 230 |
| IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 4 poles in series | | | . |
| | 75V | A | 310 |
| | 110V | Α | 310 |
| | 220V | А | 310 |
| | 330V | A | 310 |
| | 460V | A | 230 |
| Short-time allowable current for 10s (IEC/EN60947-1) | | Α | 2640 |
| Protection fuse | | | |
| | gG (IEC) | А | 630 |
| | aM (IEC) | А | 500 |
| Making capacity (RMS value) | | А | 3300 |
| Breaking capacity at voltage | | | |
| | 440V | А | 2640 |
| | 500V | А | 2240 |
| | 690V | А | 2000 |
| Resistance per pole (average value) | | mΩ | 0.12 |
| Power dissipation per pole (average value) | | | •••= |
| | lth | W | 30 |
| | AC-3 | Ŵ | 13 |
| Tightening torque for terminals | //0/0 | | 10 |
| nginening torque for terminals | min | Nim | 25 |
| | min | Nm Nm | 35 35 |
| | max | | |
| | min | lbin Ibin | 310 |
| | max | lbin | 310 |
| Tightening torque for coil terminal | | | <u>.</u> |
| | min | Nm | 0.8 |
| | max | Nm | 1 |
| Power terminal protection according to IEC/EN 60529 | | | IP00 |
| Mechanical features | | | |
| Operating position | | | |
| | normal | | Vertical plan |
| | allowable | | ±30° |
| Fixing | | | Screw |
| | | | |



BF330T4E024 FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 500A, AC/DC COIL,

24...60VAC - 20...60VDC

| | | cycles | 5000000 |
|-----------------------------------|--|---|---|
| | | | 700000 |
| | | 0,000 | |
| d according to EN/ISO 13489-1 | | | |
| Ű | rated load | cycles | 1000000 |
| | | | yes |
| | | | |
|)/60Hz, 60Hz | | | |
| | min | V | 24 |
| | max | V | 60 |
| | | | |
| of 50/60Hz coil powered at 50Hz | | | |
| pick-up | | | |
| | min | | 80 Us min |
| | max | %Us | 110 Us max |
| drop-out | | | |
| | max | %Us | ≤70 Us min |
| • | | | |
| pick-up | | | |
| | | | 80 Us min |
| -land and | max | %US | 110 Us max |
| drop-out | 2001 | 0/110 | ≤70 Us min |
| motion at 20°C | IIIdX | 7605 | |
| • | | | |
| of 50/60HZ coll powered at 50HZ | in ruch | ١/٨ | 160320 |
| | | | 3.58.0 |
| of 50/60Hz coil powered at 60Hz | noiding | VA | 5.56.0 |
| of 50/60112 coll powered at 60112 | in-rush | \/Δ | 160320 |
| | | | 3.58.0 |
| of 60Hz coil powered at 60Hz | noiding | VA | 0.00.0 |
| | in-rush | VA | 160320 |
| | | | 3.58.0 |
| 20°C 50Hz | nording | | 3.58.0 |
| | | | 0.0.1.0.0 |
| le | | | |
| | min | V | 20 |
| | max | V | 60 |
| | | | |
| pick-up | | | |
| | min | %Us | 85 Us min |
| | max | %Us | 110 Us max |
| drop-out | | | |
| | max | %Us | ≤70 Us min |
| | тал | | |
| ion ≤20°C | тах | , | |
| ion ≤20°C | in-rush | W | 160230 |
| ion ≤20°C | | | 160230 3.58.0 |
| ion ≤20°C | in-rush | W | |
| ion ≤20°C | in-rush | W | 3.58.0 |
| ion ≤20°C | in-rush | W W | 3.58.0 |
| | of 50/60Hz coil powered at 50Hz pick-up drop-out of 50/60Hz coil powered at 60Hz pick-up drop-out mption at 20°C of 50/60Hz coil powered at 50Hz of 50/60Hz coil powered at 60Hz of 60Hz coil powered at 60Hz ez0°C 50Hz le | /60Hz, 60Hz min max of 50/60Hz coil powered at 50Hz pick-up min max drop-out max of 50/60Hz coil powered at 60Hz pick-up min max drop-out max drop-out max drop-out max drop-out max pick-up min max drop-out max pick-up in-rush holding of 50/60Hz coil powered at 50Hz in-rush holding of 60Hz coil powered at 60Hz in-rush holding cor 50Hz min max | id according to EN/ISO 13489-1 rated load cycles //60Hz, 60Hz of 50/60Hz coil powered at 50Hz pick-up drop-out max %Us of 50/60Hz coil powered at 60Hz pick-up min %Us max %Us drop-out max %Us drop-out max %Us drop-out max %Us drop-out max %Us drop-out max %Us drop-out max %Us drop-out max %Us drop-out max %Us max %Us max %Us in-rush VA holding VA of 50/60Hz coil powered at 50Hz in-rush VA holding VA of 60Hz coil powered at 60Hz in-rush VA holding VA drof 60Hz coil powered at 60Hz in-rush VA holding VA |

in AC

ENERGY AND AUTOMATION

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 500A, AC/DC COIL, 24...60VAC - 20...60VDC

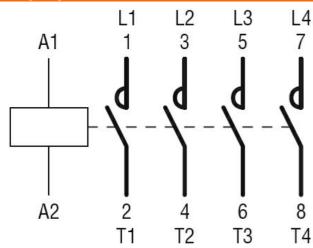
BF330T4E024

| | Closing NO | | | | |
|--|--|-----------------------|-------------------|-----------------|-----|
| | | min | ms | 80 | |
| | | max | ms | 120 | |
| | Opening NO | | | | |
| | | min | ms | 30 | |
| | | max | ms | 75 | |
| UL technical data | | | | | |
| Yielded mechanical p | performance | | | | |
| | for three-phase AC motor | | | | |
| | | 200/208V | HP | 100 | |
| | | 220/230V | HP | 125 | |
| | | 460/480V | HP | | |
| | | | | 250 | |
| | | 575/600V | HP | 300 | |
| General USE | | | | | |
| | Contactor | | | | |
| | | AC current | Α | 500 | |
| Short-circuit protectio | n fuse, 600V | | | | |
| · | High fault | | | | |
| | - | Short circuit current | kA | 100 | |
| | | Fuse rating | A | 600 | |
| | | Fuse class | | J | |
| | Standard fault | | | 0 | |
| | Stanuaru rault | Short circuit current | kA | 18 | |
| | | | | | |
| | | Fuse rating | А | 600 | |
| | | Fuse class | | RK5 | |
| Ambient conditions | | | | | |
| Temperature | | | | | |
| | Operating temperature | | | | |
| | | min | °C | -40 | |
| | | max | °C | 70 | |
| | Storage temperature | | | | |
| | | | | | |
| | | min | °C | -50 | |
| | | | °C °C | -50 80 | |
| Max altitude | | min max | °C | 80 | |
| Max altitude | ion | | | | |
| Resistance & Protect | ion | | °C | 80 3000 | |
| Resistance & Protect Pollution degree | ion | | °C | 80 | |
| Resistance & Protect | ion | | °C m | 80 3000 3 | |
| Resistance & Protect Pollution degree Dimensions | | | °C | 80 3000 3 | |
| Resistance & Protect Pollution degree Dimensions | | | °C m | 80 3000 3 | |
| Resistance & Protect Pollution degree Dimensions | 92.5 | | °C m | 80 3000 3 | |
| Resistance & Protect Pollution degree Dimensions | | | °C m | 80 3000 3 | |
| Resistance & Protect Pollution degree Dimensions | 92.5 | | °C m | 80 3000 3 | |
| Resistance & Protect Pollution degree Dimensions | 92.5 | | °C m | 80 3000 3 | |
| Resistance & Protect Pollution degree Dimensions | 92.5 | | °C m | 80 3000 3 | |
| Resistance & Protect Pollution degree Dimensions | 92.5 | | °C m | 80 3000 3 | |
| Resistance & Protect Pollution degree Dimensions | | | °C m -181.6 | 80 3000 3 | |
| Resistance & Protect Pollution degree Dimensions | | | °C m -181.6 | 80 3000 3 | |
| Resistance & Protect Pollution degree Dimensions | | | °C m -181.5 | 80 3000 3 | 168 |
| Resistance & Protect Pollution degree Dimensions | | | °C m -181.6 | 80 3000 3 | |
| Resistance & Protect Pollution degree Dimensions | | | °C m -181.6 | 80 3000 3 | 168 |
| Resistance & Protect Pollution degree Dimensions | 92.5 () () () () () () () () () () | | °C m -181.6 | 80 3000 3 | 168 |
| Resistance & Protect Pollution degree Dimensions | | | °C m -181.6 | 80 3000 3 | 168 |
| Resistance & Protect Pollution degree Dimensions | | | °C m -181.6 | 80 3000 3 | 168 |
| Resistance & Protect Pollution degree Dimensions | | | °C m -181.6 | 80 3000 3 | 168 |



ENERGY AND AUTOMATION

Wiring diagrams



Certifications and compliance

| Compliance | | |
|---------------------|------------------------|------------------|
| | CSA C22.2 n° 60947-1 | |
| | CSA C22.2 n° 60947-4-1 | |
| | IEC/EN/BS 60947-1 | |
| | IEC/EN/BS 60947-4-1 | |
| | UL 60947-1 | |
| | UL 60947-4-1 | |
| Certificates | | |
| | cULus | |
| ETIM classification | | |
| | | EC000066 - |
| ETIM 8.0 | | Power contactor, |

AC switching

FOUR-POLE CONTACTOR, IEC OPERATING CURRENT ITH (AC1) = 500A, AC/DC COIL, 24...60VAC - 20...60VDC