

## RADE KONCAR CONTACTOR CNN130

**130**A/65kW (AC3, 400V/50Hz); 150A(AC1) In conformity with standard IEC 60947-4-1

| Contactor type   |   |   | CNN 130  |
|--|---|---|--|
| lechanical endurance   | make/brake operations   | x10 <sup>6</sup> 5  |  |
| nsulation rating   |   | V   | 1000   |
| Permissible ambient te   |   | °C  | from -25 to +55  |
|  | omagnet in cold state with Un   |   |  |
| AC operated  | closing   | VA  | 400  |
|  | P.F.  |   | 0.48   |
|  | closed<br>P.F.  | VA  | 26<br>0.24   |
| Coil voltage tolerances  |   |   | 0.24<br>0.85-1.1Un   |
| luration of making and   |   |   | 0.00 1.1011  |
| values are also valid for<br>).8 to 1.1 Un for each in   | voltages of electromagnet from  |   |  |
| of electric arc.   |   |   |  |
| AC operated  | closing time  | ms  | 20 - 50  |
|  | opening time  | ms  | 10 - 30  |
|  | duration of electric arc  | ms  | 10 - 15  |
|  | g operations  |   |  |
| vithout thermal reley  |   |   |  |
| utiliza  | ation category AC1  |   |  |
|  | AC2, AC3  |   |  |
| with thormal relay   | AC4   |   |  |
| wur urennar relay  |   | s/n   |  |
|  |   |   | 1000<br>500<br>250<br>15<br>10/5,5   |
| Resistivity to shocks  | (square shock)  | g/ms  | and  |
| Resistivity to shocks  | (square shock)  | g/ms  | and<br>5/12  |
|  |   | g/ms  |  |
| Short-circuit protection   | n   | g/ms  |  |
| Short-circuit protection<br>contactors without overlo<br>Main circuit  | n   | g/ms  |  |
| Short-circuit protection<br>contactors without overlo<br><i>Jain circuit</i><br>Vith fuse links  | n<br>pad relays   |   | 5/12   |
| Short-circuit protection<br>contactors without overlo<br><i>Jain circuit</i><br>With fuse links<br>acc. To IEC 60947-4-1   | n<br>bad relays<br>Type of coord. "1" gl/gG   | A   | 5/12   |
| Short-circuit protection<br>contactors without overlo<br><b>Jain circuit</b><br>With fuse links<br>acc. To IEC 60947-4-1<br>DIN VDE 0660 Part 102  | n<br>bad relays<br>Type of coord. "1" gl/gG<br>Type of coord. "2"   |   | 5/12   |
| Short-circuit protection<br>contactors without overlo<br><b>Jain circuit</b><br>With fuse links<br>acc. To IEC 60947-4-1<br>DIN VDE 0660 Part 102  | n<br>bad relays<br>Type of coord. "1" gl/gG<br>Type of coord. "2"   | A   | 5/12   |
| of electric arc.<br>AC operated<br>Frequency of switching<br>without thermal reley<br>utilizat<br>with thermal relay<br>Resistivity to shocks<br>Short-circuit protection<br>contactors without overloa<br>Main circuit<br>Vith fuse links<br>licc. To IEC 60947-4-1<br>DIN VDE 0660 Part 102<br>Sizes of connection con<br>nain circuit | n<br>bad relays<br>Type of coord. "1" gl/gG<br>Type of coord. "2"<br>nductors   | A<br>A  | 5/12   |
|  | n<br>bad relays<br>Type of coord. "1" gl/gG<br>Type of coord. "2"   | A   | 5/12   |
| Short-circuit protection<br>contactors without overlo<br><b>Jain circuit</b><br>With fuse links<br>acc. To IEC 60947-4-1<br>DIN VDE 0660 Part 102  | n<br>bad relays<br>Type of coord. "1" gl/gG<br>Type of coord. "2"<br>mductors<br>Rigid solid  | ms<br>ms<br>s/h<br>s/h<br>s/h<br>g/ms<br>A<br>A   | 5/12<br>200<br>160   |
| Short-circuit protection<br>contactors without overla<br>Main circuit<br>With fuse links<br>acc. To IEC 60947-4-1<br>DIN VDE 0660 Part 102<br>Sizes of connection co   | n<br>bad relays<br>Type of coord. "1" gl/gG<br>Type of coord. "2"<br>onductors<br>Rigid solid<br>Stranded<br>Stranded   | A<br>A<br>mm <sup>2</sup>   | 5/12<br>200<br>160<br>1x(16 - 95)<br>2x(16-70)   |
| Short-circuit protection<br>contactors without overla<br>Main circuit<br>With fuse links<br>acc. To IEC 60947-4-1<br>DIN VDE 0660 Part 102<br>Sizes of connection co   | n<br>bad relays<br>Type of coord. "1" gl/gG<br>Type of coord. "2"<br>onductors<br>Rigid solid<br>Stranded   | A<br>A<br>mm <sup>2</sup><br>mm <sup>2</sup>  | 5/12<br>200<br>160<br>1x(16 - 95)  |
| Short-circuit protection<br>contactors without overla<br>Main circuit<br>With fuse links<br>acc. To IEC 60947-4-1<br>DIN VDE 0660 Part 102<br>Sizes of connection co   | n<br>bad relays<br>Type of coord. "1" gl/gG<br>Type of coord. "2"<br>onductors<br>Rigid solid<br>Stranded<br>Stranded   | A<br>A<br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm <sup>2</sup>   | 5/12<br>200<br>160<br>1x(16 - 95)<br>2x(16-70)   |
| Short-circuit protection<br>contactors without overla<br>Main circuit<br>With fuse links<br>acc. To IEC 60947-4-1<br>DIN VDE 0660 Part 102<br>Sizes of connection co   | n<br>bad relays<br>Type of coord. "1" gl/gG<br>Type of coord. "2"<br>onductors<br>Rigid solid<br>Stranded<br>Stranded<br>Flatbar  | A<br>A<br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm <sup>2</sup>   | 5/12<br>200<br>160<br>1x(16 - 95)<br>2x(16-70)<br>16x4   |
| Short-circuit protection<br>contactors without overlo<br>Main circuit<br>Vith fuse links<br>acc. To IEC 60947-4-1<br><u>DIN VDE 0660 Part 102</u><br>Sizes of connection co<br>nain circuit  | n<br>bad relays<br>Type of coord. "1" gl/gG<br>Type of coord. "2"<br>onductors<br>Rigid solid<br>Stranded<br>Stranded<br>Stranded<br>Flatbar<br>Screw   | A<br>A<br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm <sup>2</sup>   | 5/12<br>200<br>160<br>1x(16 - 95)<br>2x(16-70)<br>16x4<br>M10  |
| Short-circuit protection<br>contactors without overla<br>Main circuit<br>With fuse links<br>acc. To IEC 60947-4-1<br>DIN VDE 0660 Part 102<br>Sizes of connection co   | n<br>bad relays<br>Type of coord. "1" gl/gG<br>Type of coord. "2"<br>onductors<br>Rigid solid<br>Stranded<br>Stranded<br>Flatbar<br>Screw<br>Screw head<br>Tightening torque  | A<br>A<br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm   | 5/12 $200$ $160$ $1x(16 - 95)$ $2x(16-70)$ $16x4$ $M10$ $5$ $10 - 12$  |
| Short-circuit protection<br>contactors without overlo<br>Main circuit<br>Vith fuse links<br>acc. To IEC 60947-4-1<br><u>DIN VDE 0660 Part 102</u><br>Sizes of connection co<br>nain circuit  | n<br>bad relays<br>Type of coord. "1" gl/gG<br>Type of coord. "2"<br>mductors<br>Rigid solid<br>Stranded<br>Stranded<br>Flatbar<br>Screw<br>Screw head<br>Tightening torque<br>Single-wire conductor  | A<br>A<br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm<br>Nm<br>Nm   | 5/12 $200$ $160$ $1x(16 - 95)$ $2x(16-70)$ $16x4$ $M10$ $5$ $10 - 12$ $1 - 2,5$                                      |
| Short-circuit protection<br>contactors without overlo<br>Main circuit<br>With fuse links<br>acc. To IEC 60947-4-1<br><u>DIN VDE 0660 Part 102</u><br>Sizes of connection co<br>nain circuit  | n<br>bad relays<br>Type of coord. "1" gl/gG<br>Type of coord. "2"<br>inductors<br>Rigid solid<br>Stranded<br>Stranded<br>Flatbar<br>Screw<br>Screw head<br>Tightening torque<br>Single-wire conductor<br>Multi-wire conductor with cable shoe   | A<br>A<br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm   | 5/12 $200$ $160$ $1x(16 - 95)$ $2x(16-70)$ $16x4$ $M10$ $5$ $10 - 12$ $1 - 2,5$ $0,75 - 1,5$                         |
| Short-circuit protection<br>contactors without overlo<br>Main circuit<br>With fuse links<br>acc. To IEC 60947-4-1<br><u>DIN VDE 0660 Part 102</u><br>Sizes of connection co<br>nain circuit  | n<br>bad relays<br>Type of coord. "1" gl/gG<br>Type of coord. "2"<br>inductors<br>Rigid solid<br>Stranded<br>Stranded<br>Flatbar<br>Screw<br>Screw head<br>Tightening torque<br>Single-wire conductor<br>Multi-wire conductor with cable shoe<br>Screw  | A<br>A<br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm<br>Nm<br>Nm   | 5/12 $200$ $160$ $1x(16 - 95)$ $2x(16-70)$ $16x4$ $M10$ $5$ $10 - 12$ $1 - 2,5$ $0,75 - 1,5$ $M3.5$                  |
| Short-circuit protection<br>contactors without overlo<br>Main circuit<br>With fuse links<br>acc. To IEC 60947-4-1<br><u>DIN VDE 0660 Part 102</u><br>Sizes of connection co<br>nain circuit  | n<br>bad relays<br>Type of coord. "1" gl/gG<br>Type of coord. "2"<br>inductors<br>Rigid solid<br>Stranded<br>Stranded<br>Flatbar<br>Screw<br>Screw head<br>Tightening torque<br>Single-wire conductor<br>Multi-wire conductor with cable shoe<br>Screw<br>Screw head  | A<br>A<br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm<br>Nm<br>Nm<br>mm <sup>2</sup><br>mm <sup>2</sup>                         | 5/12 $200$ $160$ $1x(16 - 95)$ $2x(16 - 70)$ $16x4$ $M10$ $5$ $10 - 12$ $1 - 2,5$ $0,75 - 1,5$ $M3.5$ $PZ2$          |
| Short-circuit protection<br>contactors without overla<br>Main circuit<br>With fuse links<br>inc. To IEC 60947-4-1<br>DIN VDE 0660 Part 102<br>Sizes of connection co<br>nain circuit   | n<br>bad relays<br>Type of coord. "1" gl/gG<br>Type of coord. "2"<br>onductors<br>Rigid solid<br>Stranded<br>Stranded<br>Flatbar<br>Screw<br>Screw head<br>Tightening torque<br>Single-wire conductor<br>Multi-wire conductor<br>Multi-wire conductor<br>Multi-wire conductor<br>Screw<br>Screw head<br>Tightening torque   | A<br>A<br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm<br>Nm<br>Nm   | 5/12 $200$ $160$ $1x(16 - 95)$ $2x(16-70)$ $16x4$ $M10$ $5$ $10 - 12$ $1 - 2,5$ $0,75 - 1,5$ $M3.5$                  |
| Short-circuit protection<br>contactors without overla<br>Main circuit<br>With fuse links<br>incc. To IEC 60947-4-1<br>JIN VDE 0660 Part 102<br>Sizes of connection co<br>nain circuit<br>auxiliary circuit   | n<br>bad relays<br>Type of coord. "1" gl/gG<br>Type of coord. "2"<br>mductors<br>Rigid solid<br>Stranded<br>Stranded<br>Flatbar<br>Screw<br>Screw head<br>Tightening torque<br>Single-wire conductor<br>Multi-wire conductor with cable shoe<br>Screw<br>Screw head<br>Tightening torque<br>Screw head<br>Tightening torque | A<br>A<br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm<br>Nm<br>Nm<br>mm <sup>2</sup><br>mm <sup>2</sup>                         | 5/12 $200$ $160$ $1x(16 - 95)$ $2x(16 - 70)$ $16x4$ $M10$ $5$ $10 - 12$ $1 - 2,5$ $0,75 - 1,5$ $M3.5$ $PZ2$          |
| Short-circuit protection<br>contactors without overla<br>Main circuit<br>With fuse links<br>icc. To IEC 60947-4-1<br><u>DIN VDE 0660 Part 102</u><br>Sizes of connection co<br>nain circuit<br>nuxiliary circuit   | n<br>bad relays<br>Type of coord. "1" gl/gG<br>Type of coord. "2"<br>mductors<br>Rigid solid<br>Stranded<br>Stranded<br>Flatbar<br>Screw<br>Screw head<br>Tightening torque<br>Single-wire conductor<br>Multi-wire conductor with cable shoe<br>Screw<br>Screw head<br>Tightening torque<br>Y contacts<br>int lth ; 35C     | A<br>A<br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm<br>Nm<br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm <sup>2</sup><br>Mm<br>A | 5/12 $200$ $160$ $1x(16 - 95)$ $2x(16-70)$ $16x4$ $M10$ $5$ $10 - 12$ $1 - 2,5$ $0,75 - 1,5$ $M3.5$ $PZ2$ $0.8$ $16$ |
| Short-circuit protection<br>contactors without overla<br>Main circuit<br>With fuse links<br>incc. To IEC 60947-4-1<br>JIN VDE 0660 Part 102<br>Sizes of connection co<br>nain circuit<br>auxiliary circuit   | n<br>bad relays<br>Type of coord. "1" gl/gG<br>Type of coord. "2"<br>mductors<br>Rigid solid<br>Stranded<br>Stranded<br>Flatbar<br>Screw<br>Screw head<br>Tightening torque<br>Single-wire conductor<br>Multi-wire conductor with cable shoe<br>Screw<br>Screw head<br>Tightening torque<br>Y contacts<br>int lth ; 35C     | A<br>A<br>mm <sup>2</sup><br>mm <sup>2</sup><br>mm<br>mm<br>Nm<br>mm <sup>2</sup><br>mm<br>Nm   | 5/12 $200$ $160$ $1x(16 - 95)$ $2x(16 - 70)$ $16x4$ $M10$ $5$ $10 - 12$ $1 - 2,5$ $0,75 - 1,5$ $M3.5$ $PZ2$ $0.8$    |

|   | 690V     | А  | 2.5  |  |
|---|----------|----|------|--|
| DC  |          |    |      |  |
| rated operational current le/DC1; L/R ≤1ms  | 24V      | A  | 10   |  |
|   | 110V     | A  | 8    |  |
|   | 220V     | A  | 2    |  |
|   | 440V     | A  | 0.6  |  |
|   | 600V     | A  | 0.4  |  |
| rated operational current le/DC13           | for 24V  | А  | 10   |  |
|   | 110V     | A  | 2.4  |  |
|   | 220V     | A  | 1.1  |  |
|   | 440V     | A  | 0.32 |  |
|   | 600V     | A  | 0.21 |  |
| Load carrying capacity of the main contacts |          |    |      |  |
| rated continuus current ith ; 35C           |          | A  | 150  |  |
| AC1 utilization category                    |          |    |      |  |
| rated current le/AC1                        |          | A  | 150  |  |
| AC2 and AC3 utilization categories          | for 230V | kW | 40   |  |
| (slip-ring and cage motors at 50Hz)         | 400V     | kW | 65   |  |
|   | 690V     | kW | 80   |  |
| AC4 utilization category                    |          |    |      |  |
| (electrical endurance of contacts:120.000   |          |    |      |  |
| rated curent                                | le/AC4   | A  | 48   |  |
| ratings of squirrel-cage motors at 50Hz for | 230V     | kW | 13   |  |
|   | 400V     | kW | 25   |  |
|   | 500V     | kW | 31   |  |
|   | 690V     | kW | 45   |  |

Dimension drawings (mm) CNN 130

Dimension drawings with auxiliary contact blocks (mm)









