

## **7GN20510** ROTARY CAM SWITCH 7GN SERIES, CHANGEOVER SWITCH 1 POLE 20A, FOR REAR MOUNTING WITH BLACK HANDLE, FRONT PLATE 48X48MM

| Draduct designation                             |                                    |                      |        | Rotary cam                    |
|---|------------------------------------|----------------------|--------|-------------------------------|
| Product designation                             |                                    |                      |        | switches                      |
| Product type designat<br>General characteristic |                                    |                      |        | 7GN20                         |
|   | 5                                  |                      |        | 51 - Changeover               |
| Switching diagram                               |                                    |                      |        | switch 1 pole                 |
| N° of elements                                  |                                    |                      |        | 1                             |
| Manuatia a farma                                |                                    |                      |        | O - Rear                      |
| Mounting form                                   |                                    |                      |        | mounting with<br>black handle |
| Contact characteristic                          | S                                  |                      |        |                               |
| Rated insulation voltage                        | ge Ui                              |                      |        |                               |
|   |                                    | IEC/EN               | V      | 690                           |
|   |                                    | UL/CSA               | V      | 600                           |
| Rated impulse withsta                           |                                    |                      | kV     | 6                             |
| Conventional free air t                         | hermal current Ith                 |                      |        |                               |
|   |                                    | IEC/EN               | А      | 20                            |
|   |                                    | UL/CSA               | А      | 20                            |
| Rated operational volt                          | -                                  |                      | V      | 480                           |
| Rated operational imp                           | -                                  |                      | kV     | 4                             |
| Maximum fuse size fo                            | r short-circuit protection In (gG) |                      |        |                               |
|   |                                    | 10kA                 | А      | 20                            |
|   |                                    | 15kA                 | A      | 16                            |
|   |                                    | 25kA                 | A      | 16                            |
| Rated short time curre                          | ent Icw                            |                      |        |                               |
|   |                                    | 1s                   | kA     | 250                           |
| Conductivity                                    |                                    |                      |        | 10/5 mA/V                     |
| Operational current le                          |                                    |                      |        |                               |
|   | AC1/AC21A                          |                      |        |                               |
|   |                                    |                      | A      | 20                            |
|   | AC15                               | 44014                |        | 10                            |
|   |                                    | 110V                 | A      | 10                            |
|   |                                    | 220/230V             | A      | 8                             |
|   |                                    | 380/400V<br>660/690V | A      | 6<br>1.5                      |
| Rated operational pov                           | vor in AC                          | 000/090V             | A      | 1.5                           |
| Nateu operational pov                           | Three-phase AC-3                   |                      |        |                               |
|   | mee-phase AC-3                     | 220/230V             | kW     | 3                             |
|   |                                    | 380/440V             | kW     | 5<br>5.5                      |
|   |                                    | 500/690V             | kW     | 5.5                           |
|   | Single-phase AC-3                  | 000/0001             | 11.0.0 | 0.0                           |
|   |                                    | 110V                 | kW     | 0.8                           |
|   |                                    | 220/230V             | kW     | 2.2                           |
|   |                                    | 380/440V             | kW     | 3                             |
|   | Three-phase AC23A                  | 000,1101             |        | -                             |
|   |                                    | 220/230V             | kW     | 5                             |
|   |                                    | 380/440V             | kW     | 7.5                           |
|   |                                    | 500/690V             | kW     | 7.5                           |
|   | Single-phase AC23A                 |                      |        |                               |
|   |                                    | 110V                 | kW     | 0.8                           |
|   |                                    | 220/230V             | kW     | 2.5                           |
|   |                                    | 380/440V             | kW     | 3.7                           |
| Rated operational cur                           | rent in DC                         |                      |        |                               |

## Rated operational current in DC

7GN20510

ENERGY AND AUTOMATION

**7GN20510** ROTARY CAM SWITCH 7GN SERIES, CHANGEOVER SWITCH 1 POLE 20A, FOR REAR MOUNTING WITH BLACK HANDLE, FRONT PLATE 48X48MM

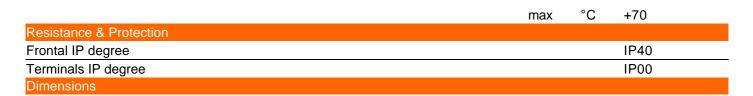
|   | DC21A  |   |  |   |
|---|--|---|--|---|
|   |  | 48V   | А  | 20  |
|   |  | 60V   | A  | 20  |
|   |  | 110V  | A  | 4   |
|   |  | 220V  |  |   |
|   |  |   | A  | 0.6   |
|   |  | 440V  | A  | 0.25  |
|   | DC23A (poles in series)  |   |  |   |
|   |  | 24V   | A  | 20 (1)  |
|   |  | 48V   | А  | 20 (2)  |
|   |  | 60V   | А  | 20 (3)  |
|   |  | 110V  | А  | 10 (3)  |
|   |  | 220V  | А  | 8 (4)   |
|   | DC13   |   |  |   |
|   |  | 24V   | А  | 20  |
|   |  | 48V   | A  | 16  |
|   |  | 40V<br>60V  |  | 12  |
|   |  |   | A  |   |
|   |  | 110V  | A  | 1   |
|   |  | 220V  | A  | 0.4   |
|   |  | 440V  | A  | 0.15  |
| Power dissipation                           |  |   | W  | 0.8   |
| Mechanical features                         |  |   |  |   |
| Terminals screw                             |  |   |  | M3  |
| Tightening torque for t                     | erminals max   |   | Nm   | 0.5   |
| Conductor size                              |  |   |  |   |
|   | AWG - Rigid cable  |   |  |   |
|   |  | min   | AWG  | 20  |
|   |  | Max   | AWG  | 12  |
|   | AWG - Flexible cable   | IVIdX   | AWG  | 12  |
|   | AWG - Flexible cable   |   |  |   |
|   |  | min   | AWG  | 20  |
|   |  | Max   | AWG  | 14  |
|   | Conductor size (IEC) - Flexible cable  |   |  |   |
|   |  |   |  |   |
|   |  | min   | mm²  | 0.5   |
|   |  | min<br>Max  | mm²<br>mm²   | 0.5<br>2.5  |
|   |  |   |  |   |
|   | Conductor size (IEC) - Rigid cable   | Max   | mm²  | 2.5   |
|   |  | Max<br>min  | mm²  | 2.5<br>0.5  |
| Mechanical life                             |  | Max   | mm²<br>mm²<br>mm²  | 2.5<br>0.5<br>2.5   |
| Mechanical life                             |  | Max<br>min  | mm²  | 2.5<br>0.5  |
| UL technical data                           | Conductor size (IEC) - Rigid cable   | Max<br>min  | mm²<br>mm²<br>mm²  | 2.5<br>0.5<br>2.5   |
|   | Conductor size (IEC) - Rigid cable   | Max<br>min  | mm²<br>mm²<br>mm²  | 2.5<br>0.5<br>2.5   |
| UL technical data                           | Conductor size (IEC) - Rigid cable   | Max<br>min<br>Max   | mm <sup>2</sup><br>mm <sup>2</sup><br>mm <sup>2</sup><br>cycles                  | 2.5<br>0.5<br>2.5<br>5x10 <sup>6</sup>  |
| UL technical data                           | Conductor size (IEC) - Rigid cable   | Max<br>min<br>Max<br>120V   | mm <sup>2</sup><br>mm <sup>2</sup><br>cycles                                     | 2.5<br>0.5<br>2.5<br>5x10 <sup>6</sup><br>1.5                                       |
| UL technical data                           | Conductor size (IEC) - Rigid cable   | Max<br>min<br>Max<br>120V<br>240V                                 | mm <sup>2</sup><br>mm <sup>2</sup><br>cycles<br>HP<br>HP                         | 2.5<br>0.5<br>2.5<br>5x10 <sup>6</sup><br>1.5<br>3                                  |
| UL technical data                           | Conductor size (IEC) - Rigid cable   | Max<br>min<br>Max<br>120V<br>240V<br>480V                         | mm <sup>2</sup><br>mm <sup>2</sup><br>cycles<br>HP<br>HP<br>HP                   | 2.5<br>0.5<br>2.5<br>5x10 <sup>6</sup><br>1.5<br>3<br>7.5                           |
| UL technical data                           | Conductor size (IEC) - Rigid cable<br>-on-line control<br>for three-phase motor  | Max<br>min<br>Max<br>120V<br>240V                                 | mm <sup>2</sup><br>mm <sup>2</sup><br>cycles<br>HP<br>HP                         | 2.5<br>0.5<br>2.5<br>5x10 <sup>6</sup><br>1.5<br>3                                  |
| UL technical data                           | Conductor size (IEC) - Rigid cable   | Max<br>min<br>Max<br>120V<br>240V<br>480V                         | mm <sup>2</sup><br>mm <sup>2</sup><br>cycles<br>HP<br>HP<br>HP                   | 2.5<br>0.5<br>2.5<br>5x10 <sup>6</sup><br>1.5<br>3<br>7.5                           |
| UL technical data                           | Conductor size (IEC) - Rigid cable<br>-on-line control<br>for three-phase motor  | Max<br>min<br>Max<br>120V<br>240V<br>480V                         | mm <sup>2</sup><br>mm <sup>2</sup><br>cycles<br>HP<br>HP<br>HP                   | 2.5<br>0.5<br>2.5<br>5x10 <sup>6</sup><br>1.5<br>3<br>7.5                           |
| UL technical data                           | Conductor size (IEC) - Rigid cable<br>-on-line control<br>for three-phase motor  | Max<br>min<br>Max<br>120V<br>240V<br>480V<br>600V                 | mm <sup>2</sup><br>mm <sup>2</sup><br>cycles<br>HP<br>HP<br>HP<br>HP             | 2.5<br>0.5<br>2.5<br>5x10 <sup>6</sup><br>1.5<br>3<br>7.5<br>10                     |
| UL technical data<br>Motor power for direct | Conductor size (IEC) - Rigid cable<br>-on-line control<br>for three-phase motor  | Max<br>min<br>Max<br>120V<br>240V<br>480V<br>600V<br>120V         | mm <sup>2</sup><br>mm <sup>2</sup><br>cycles<br>HP<br>HP<br>HP<br>HP             | 2.5<br>0.5<br>2.5<br>5x10 <sup>6</sup><br>1.5<br>3<br>7.5<br>10<br>0.75             |
| UL technical data<br>Motor power for direct | Conductor size (IEC) - Rigid cable<br>-on-line control<br>for three-phase motor  | Max<br>min<br>Max<br>120V<br>240V<br>480V<br>600V<br>120V         | mm <sup>2</sup><br>mm <sup>2</sup><br>cycles<br>HP<br>HP<br>HP<br>HP             | 2.5<br>0.5<br>2.5<br>5x10 <sup>6</sup><br>1.5<br>3<br>7.5<br>10<br>0.75             |
| UL technical data<br>Motor power for direct | Conductor size (IEC) - Rigid cable<br>-on-line control<br>for three-phase motor<br>for single-phase motor              | Max<br>min<br>Max<br>120V<br>240V<br>480V<br>600V<br>120V         | mm <sup>2</sup><br>mm <sup>2</sup><br>cycles<br>HP<br>HP<br>HP<br>HP             | 2.5<br>0.5<br>2.5<br>5x10 <sup>6</sup><br>1.5<br>3<br>7.5<br>10<br>0.75             |
| UL technical data<br>Motor power for direct | Conductor size (IEC) - Rigid cable<br>-on-line control<br>for three-phase motor  | Max<br>min<br>Max<br>120V<br>240V<br>480V<br>600V<br>120V<br>240V | mm <sup>2</sup><br>mm <sup>2</sup><br>cycles<br>HP<br>HP<br>HP<br>HP<br>HP       | 2.5<br>0.5<br>2.5<br>5x10 <sup>6</sup><br>1.5<br>3<br>7.5<br>10<br>0.75<br>2        |
| UL technical data<br>Motor power for direct | Conductor size (IEC) - Rigid cable<br>-on-line control<br>for three-phase motor<br>for single-phase motor              | Max<br>min<br>Max<br>120V<br>240V<br>480V<br>600V<br>120V<br>240V | mm <sup>2</sup><br>mm <sup>2</sup><br>cycles<br>HP<br>HP<br>HP<br>HP<br>HP<br>HP | 2.5<br>0.5<br>2.5<br>5x10 <sup>6</sup><br>1.5<br>3<br>7.5<br>10<br>0.75<br>2<br>-25 |
| UL technical data<br>Motor power for direct | Conductor size (IEC) - Rigid cable -on-line control for three-phase motor for single-phase motor Operating temperature | Max<br>min<br>Max<br>120V<br>240V<br>480V<br>600V<br>120V<br>240V | mm <sup>2</sup><br>mm <sup>2</sup><br>cycles<br>HP<br>HP<br>HP<br>HP<br>HP       | 2.5<br>0.5<br>2.5<br>5x10 <sup>6</sup><br>1.5<br>3<br>7.5<br>10<br>0.75<br>2        |
| UL technical data<br>Motor power for direct | Conductor size (IEC) - Rigid cable<br>-on-line control<br>for three-phase motor<br>for single-phase motor              | Max<br>min<br>Max<br>120V<br>240V<br>480V<br>600V<br>120V<br>240V | mm <sup>2</sup><br>mm <sup>2</sup><br>cycles<br>HP<br>HP<br>HP<br>HP<br>HP<br>HP | 2.5<br>0.5<br>2.5<br>5x10 <sup>6</sup><br>1.5<br>3<br>7.5<br>10<br>0.75<br>2<br>-25 |

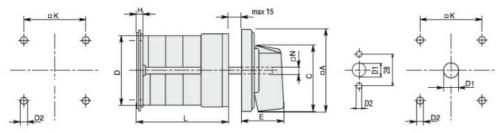
7GN20510

The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding



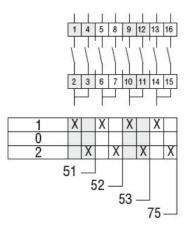
## **7GN20510** ROTARY CAM SWITCH 7GN SERIES, CHANGEOVER SWITCH 1 POLE 20A, FOR REAR MOUNTING WITH BLACK HANDLE, FRONT PLATE 48X48MM





| Series | Dimensions |      |    |     |      |     | L Number of elements |    |      |       |      |       |       |       |       |       |       |       |       |       |
|--------|------------|------|----|-----|------|-----|----------------------|----|------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Series | □A         | С    | ØD | ØD2 | E    | Н   | ۵K                   | ۵N | 1    | 2     | 3    | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    |
| 7GN12  | 48         | 39.5 | 39 | 5   | 26.5 | 5   | 36                   | 6  | 38.1 | 47.8  | 57.5 | 67.2  | 76.9  | 86.6  | 96.3  | 106   | 115.7 | 125.4 | 135.1 | 144.8 |
| 7GN20  | 48         | 39.5 | 39 | 5   | 26.5 | 5   | 36                   | 6  | 38.1 | 47.8  | 57.5 | 67.2  | 76.9  | 86.6  | 96.3  | 106   | 115.7 | 125.4 | 135.1 | 144.8 |
| 7GN25  | 48         | 39.5 | 43 | 5   | 26.5 | 5   | 36                   | 6  | 42.5 | 56.1  | 69.7 | 83.3  | 96.9  | 110.5 | 124.1 | 137.7 | 151.3 | 164.9 | 178.5 | 192.1 |
| 7GN32  | 65         | 53   | 58 | 5   | 34.5 | 5.5 | 48                   | 7  | 48.5 | 63.6  | 78.7 | 93.8  | 108.9 | 124   | 139.1 | 154.2 | 169.3 | 184.4 | 199.5 | 214.6 |
| 7GN40  | 65         | 53   | 58 | 5   | 34.5 | 5.5 | 48                   | 7  | 48.5 | 63.6  | 78.7 | 93.8  | 108.9 | 124   | 139.1 | 154.2 | 169.3 | 184.4 | 199.5 | 214.6 |
| 7GN63  | 65         | 53   | 62 | 6   | 34.5 | 7.5 | 68                   | 7  | 53.3 | 71.4  | 89.5 | 107.6 | 125.7 | 143.8 | 161.9 | 180   | 198.1 | 216.2 | 234.3 | 252.4 |
| 7GN125 | 90         | 70.5 | 86 | 6   | 41.4 | 7.5 | 68                   | 9  | 74.8 | 103.9 | 133  | 162.1 | 191.2 | 220.3 | 249.4 | 278.5 | 307.6 | 336.7 | 365.8 | 394.9 |

Wiring diagrams



## Certifications and compliance

| Compliance          |                     |  |
|---------------------|---------------------|--|
| -                   | CSA C22.2 n° 14     |  |
|                     | IEC/EN/BS 60947-1   |  |
|                     | IEC/EN/BS 60947-3   |  |
|                     | IEC/EN/BS 60947-5-1 |  |
|                     | UL60947-4-1         |  |
| Certificates        |                     |  |
|                     | cCSAus              |  |
|                     | EAC                 |  |
|                     | UL                  |  |
| ETIM classification |                     |  |
| ETIM 8.0            |                     | EC001029 -<br>Selector switch,<br>complete |

7GN20510