**ENERGY AND AUTOMATION** 

# ROTARY CAM SWITCH 7GN SERIES, MULTI-STEP 0-1-2, 1 POLE 20A, FOR REAR MOUNTING WITH BLACK HANDLE, FRONT PLATE 48X48MM

| Product designation                                    |           |    | Rotary cam switches              |
|--|-----------|----|----------------------------------|
| Product type designation                               |           |    | 7GN20                            |
| General characteristics                                |           |    |                                  |
| Switching diagram                                      |           |    | 107 - Multi-step<br>0-1-2 1 pole |
| N° of elements   |           |    | 1                                |
|  |           |    | O - Rear                         |
| Mounting form  |           |    | mounting with<br>black handle    |
| Contact characteristics                                |           |    | black nandle                     |
| Rated insulation voltage Ui                            |           |    |                                  |
| Taled Insulation voltage of                            | IEC/EN    | V  | 690                              |
|  | UL/CSA    | V  | 600                              |
| Rated impulse withstand voltage Uimp                   |           | kV | 6                                |
| Conventional free air thermal current Ith              |           |    |                                  |
|  | IEC/EN    | Α  | 20                               |
|  | UL/CSA    | Α  | 20                               |
| Rated operational voltage                              |           | V  | 480                              |
| Rated operational impulse voltage                      |           | kV | 4                                |
| Maximum fuse size for short-circuit protection In (gG) |           |    |                                  |
|  | 10kA      | Α  | 20                               |
|  | 15kA      | Α  | 16                               |
|  | 25kA      | Α  | 16                               |
| Rated short time current lcw                           |           |    |                                  |
|  | 1s        | Α  | 250                              |
| Conductivity   |           |    | 10/5 mA/V                        |
| Operational current le IEC/EN                          |           |    |                                  |
| AC1/AC21A  |           |    |                                  |
|  |           | A  | 20                               |
| AC15   |           |    |                                  |
|  | 110V      | Α  | 10                               |
|  | 220/230V  | A  | 8                                |
|  | 380/400V  | A  | 6                                |
| Rated operational power in AC                          | 660/690V  | A  | 1.5                              |
| Three-phase AC-3                                       |           |    |                                  |
| Tillee-pilase AC-3                                     | 220/230V  | kW | 3                                |
|  | 380/440V  | kW | 5<br>5.5                         |
|  | 500/690V  | kW | 5.5                              |
| Single-phase AC-3                                      | 330,000 V |    |                                  |
| 5g.c F.1000 / 10 0                                     | 110V      | kW | 0.8                              |
|  | 220/230V  | kW | 2.2                              |
|  | 380/440V  | kW | 3                                |
| Three-phase AC23A                                      |           |    |                                  |
| ·  | 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                              |
| Rated operational current in DC                        | 380/440V  | kW | 3.7                              |

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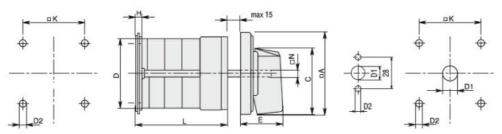
# ROTARY CAM SWITCH 7GN SERIES, MULTI-STEP 0-1-2, 1 POLE 20A, FOR REAR MOUNTING WITH BLACK HANDLE, FRONT PLATE 48X48MM

|  | DC04A   |   |                                |  |  |
|--|---|---|--------------------------------|--|--|
|  | DC21A   | 40\/  | ۸                              | 20   |  |
|  |   | 48V   | A                              | 20   |  |
|  |   | 60V   | A                              | 20   |  |
|  |   | 110V  | Α                              | 4  |  |
|  |   | 220V  | Α                              | 0.6  |  |
|  |   | 440V  | Α                              | 0.25   |  |
|  | DC23A (poles in series)   |   |                                |  |  |
|  |   | 24V   | Α                              | 20 (1)   |  |
|  |   | 48V   | Α                              | 20 (2)   |  |
|  |   | 60V   | Α                              | 20 (3)   |  |
|  |   | 110V  | Α                              | 10 (3)   |  |
|  |   | 220V  | Α                              | 8 (4)  |  |
|  | DC13  |   |                                |  |  |
|  |   | 24V   | Α                              | 20   |  |
|  |   | 48V   | Α                              | 16   |  |
|  |   | 60V   | Α                              | 12   |  |
|  |   | 110V  | Α                              | 1  |  |
|  |   | 220V  | Α                              | 0.4  |  |
|  |   | 440V  | Α                              | 0.15   |  |
| Power dissipation                          |   |   | W                              | 0.8  |  |
| Mechanical features                        |   |   |                                | 0.0  |  |
| Terminals screw                            |   |   |                                | M3   |  |
| Tightening torque for te                   | arminals may  |   | Nm                             | 0.5  |  |
| Conductor size                             | errilliais max  |   | INIII                          | 0.5  |  |
| Conductor Size                             | AWC Bigid poble   |   |                                |  |  |
|  | AWG - Rigid cable   |   | AWG                            | 20   |  |
|  |   | min   |                                | 20   |  |
|  | AMO EL III III  | Max   | 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  |   |                                |  |  |
|  | Conductor size (IEC) - Rigid cable  |   |                                | 0.5  |  |
|  | Conductor size (IEC) - Rigid cable  | Max   | mm²                            | 2.5  |  |
| Mechanical life                            | Conductor size (IEC) - Rigid cable  | Max<br>min                                  | mm²                            | 0.5  |  |
| UL technical data                          |   | Max<br>min                                  | mm²<br>mm²<br>mm²              | 2.5<br>0.5<br>2.5  |  |
|  |   | Max<br>min                                  | mm²<br>mm²<br>mm²              | 2.5<br>0.5<br>2.5  |  |
| UL technical data                          |   | Max<br>min                                  | mm²<br>mm²<br>mm²              | 2.5<br>0.5<br>2.5  |  |
| UL technical data                          | -on-line control  | Max<br>min                                  | mm²<br>mm²<br>mm²              | 2.5<br>0.5<br>2.5  |  |
| UL technical data                          | -on-line control  | Max<br>min<br>Max                           | mm²<br>mm²<br>mm²<br>cycles    | 2.5<br>0.5<br>2.5<br>5x10 <sup>6</sup>                                       |  |
| UL technical data                          | -on-line control  | Max<br>min<br>Max                           | mm²<br>mm²<br>mm²<br>cycles    | 2.5<br>0.5<br>2.5<br>5x10 <sup>6</sup>                                       |  |
| UL technical data                          | -on-line control  | Max<br>min<br>Max<br>120V<br>240V           | mm² mm² cycles                 | 2.5<br>0.5<br>2.5<br>5x10 <sup>6</sup><br>1.5                                |  |
| UL technical data                          | -on-line control<br>for three-phase motor   | Max<br>min<br>Max<br>120V<br>240V<br>480V   | mm²<br>mm²<br>cycles           | 2.5<br>0.5<br>2.5<br>5x10 <sup>6</sup><br>1.5<br>3<br>7.5                    |  |
| UL technical data                          | -on-line control  | Max min Max  120V 240V 480V 600V            | mm²<br>mm²<br>cycles           | 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                          | -on-line control<br>for three-phase motor   | Max min Max  120V 240V 480V 600V            | mm² mm² cycles  HP HP HP 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 Motor power for direct-  | -on-line control<br>for three-phase motor   | Max min Max  120V 240V 480V 600V            | mm² mm² cycles  HP HP 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  Motor power for direct- | -on-line control<br>for three-phase motor   | Max min Max  120V 240V 480V 600V            | mm² mm² cycles  HP HP HP 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 Motor power for direct-  | -on-line control for three-phase motor  for single-phase motor                        | Max min Max  120V 240V 480V 600V            | mm² mm² cycles  HP HP HP 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  Motor power for direct- | -on-line control<br>for three-phase motor   | Max min Max  120V 240V 480V 600V  120V 240V | mm² mm² cycles  HP HP HP HP HP | 2.5 0.5 2.5 5x10 <sup>6</sup> 1.5 3 7.5 10 0.75 2                            |  |
| UL technical data  Motor power for direct- | -on-line control for three-phase motor  for single-phase motor                        | Max min Max  120V 240V 480V 600V  120V 240V | mm² mm² cycles  HP HP HP HP 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  Motor power for direct- | -on-line control for three-phase motor  for single-phase motor  Operating temperature | Max min Max  120V 240V 480V 600V  120V 240V | mm² mm² cycles  HP HP HP HP HP | 2.5 0.5 2.5 5x10 <sup>6</sup> 1.5 3 7.5 10 0.75 2                            |  |
| UL technical data  Motor power for direct- | -on-line control for three-phase motor  for single-phase motor                        | Max min Max  120V 240V 480V 600V  120V 240V | mm² mm² cycles  HP HP HP HP 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 |  |

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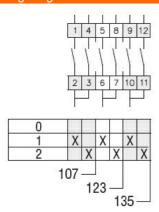
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|                         | max | °C | +70  |
|-------------------------|-----|----|------|
| Resistance & Protection |     |    |      |
| Frontal IP degree       |     |    | IP40 |
| Terminals IP degree     |     |    | IP00 |
| D                       |     |    |      |



| Series Dimensions |    |      |    |     | L Number of elements |     |    |    |      |       |      |       |       |       |       |       |       |       |       |       |
|-------------------|----|------|----|-----|----------------------|-----|----|----|------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Series            | □A | С    | ØD | ØD2 | Е                    | Н   | □K | □N | 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 -Selector switch, complete