

Variable frequency drive, 400 V AC, 3-phase, 170 A, 90 kW, IP21/NEMA1, DC link choke



**Part no.** DG1-34170FN-C21C

9702-5001-00P

**EL Number  
(Norway)**

4138087

| General specifications |  |  |
|------------------------|--|--|
| Product name           |  | Eaton DG1 variable frequency drive   |
| Part no.               |  | DG1-34170FN-C21C   |
| EAN                    |  | 4015081721498  |
| Product Length/Depth   |  | 340.7 millimetre   |
| Product height         |  | 888.5 millimetre   |
| Product width          |  | 288 millimetre   |
| Product weight         |  | 70.6 kilogram  |
| Certifications         |  | IEC/EN61800-5<br>C-Tick<br>IEC/EN61800-3<br>CUL<br>UkrSEPRO<br>EAC<br>IEC/EN 61800-3<br>CE<br>Certified by UL for use in Canada<br>UL File No.: E134360<br>CSA-C22.2 No. 274-13<br>Specification for general requirements: IEC/EN 61800-2<br>Safety requirements: IEC/EN 61800-5<br>UL Category Control No.: NMMS, NMMS7<br>UL<br>UL508<br>RoHS, ISO 9001<br>UL report applies to both US and Canada |
| Product Tradename      |  | DG1  |
| Product Type           |  | Variable frequency drive   |
| Product Sub Type       |  | None   |

### Technical data ETIM 9.0

| Low-voltage industrial components (EG000017) / Frequency converter =< 1 kV (EC001857)  |    |           |
|--|----|-----------|
| Electric engineering, automation, process control engineering / Electrical drive / Static frequency converter / Static frequency / Servo converter = < 1 kV (ecl@ss13-27-02-31-01 [AKE177019]) |    |           |
| Mains voltage  | V  | 380 - 500 |
| Mains frequency  |    | 50/60 Hz  |
| Number of phases input   |    | 3         |
| Number of phases output  |    | 3         |
| Max. output frequency  | Hz | 400       |
| Max. output voltage  | V  | 500       |
| Nominal output current I2N   | A  | 170       |
| Max. output at quadratic load at rated output voltage  | kW | 110       |
| Max. output at linear load at rated output voltage   | kW | 90        |
| Power consumption  | W  | 2024      |
| Relative symmetric net frequency tolerance   | %  | 10        |
| Relative symmetric net voltage tolerance   | %  | 10        |
| Number of analogue outputs   |    | 2         |
| Number of analogue inputs  |    | 2         |
| Number of digital outputs  |    | 1         |
| Number of digital inputs   |    | 8         |
| With control element   |    | Yes       |
| Application in industrial area permitted   |    | Yes       |
| Application in domestic- and commercial area permitted   |    | Yes       |
| Supporting protocol for TCP/IP   |    | Yes       |
| Supporting protocol for PROFIBUS   |    | Yes       |

|   |  |    |             |
|---|--|----|-------------|
| Supporting protocol for CAN                         |  |    | Yes         |
| Supporting protocol for INTERBUS                    |  |    | No          |
| Supporting protocol for ASI                         |  |    | No          |
| Supporting protocol for KNX                         |  |    | No          |
| Supporting protocol for Modbus                      |  |    | Yes         |
| Supporting protocol for Data-Highway                |  |    | No          |
| Supporting protocol for DeviceNet                   |  |    | Yes         |
| Supporting protocol for SUCONET                     |  |    | No          |
| Supporting protocol for LON                         |  |    | No          |
| Supporting protocol for PROFINET IO                 |  |    | Yes         |
| Supporting protocol for PROFINET CBA                |  |    | No          |
| Supporting protocol for SERCOS                      |  |    | No          |
| Supporting protocol for Foundation Fieldbus         |  |    | No          |
| Supporting protocol for EtherNet/IP                 |  |    | Yes         |
| Supporting protocol for AS-Interface Safety at Work |  |    | No          |
| Supporting protocol for DeviceNet Safety            |  |    | No          |
| Supporting protocol for INTERBUS-Safety             |  |    | No          |
| Supporting protocol for PROFIsafe                   |  |    | No          |
| Supporting protocol for SafetyBUS p                 |  |    | No          |
| Supporting protocol for BACnet                      |  |    | Yes         |
| Supporting protocol for other bus systems           |  |    | Yes         |
| Number of HW-interfaces industrial Ethernet         |  |    | 1           |
| Number of interfaces PROFINET                       |  |    | 0           |
| Number of HW-interfaces RS-232                      |  |    | 0           |
| Number of HW-interfaces RS-422                      |  |    | 0           |
| Number of HW-interfaces RS-485                      |  |    | 1           |
| Number of HW-interfaces serial TTY                  |  |    | 0           |
| Number of HW-interfaces USB                         |  |    | 0           |
| Number of HW-interfaces parallel                    |  |    | 0           |
| Number of HW-interfaces other                       |  |    | 1           |
| With optical interface                              |  |    | No          |
| With PC connection                                  |  |    | Yes         |
| Integrated breaking resistance                      |  |    | No          |
| 4-quadrant operation possible                       |  |    | No          |
| Type of converter                                   |  |    | U converter |
| Degree of protection (IP)                           |  |    | IP21        |
| Degree of protection (NEMA)                         |  |    | 1           |
| Height  |  | mm | 888.5       |
| Width   |  | mm | 288         |
| Depth   |  | mm | 340.7       |