Ref. Certif. No.

FI-58747

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

CB TEST CERTIFICATE

Product	Air cooled enclosed drive
Name and address of the applicant	Danfoss Drives Oy Runsorintie 7 FI-65380 Vaasa, Finland
Name and address of the manufacturer	Danfoss Drives Oy Runsorintie 7 FI-65380 Vaasa, Finland
Name and address of the factory Note: *When more than one factory, please report on page 2*	Danfoss Drives Oy Runsorintie 7 FI-65380 Vaasa, Finland ☐ Additional Information on page 2
Ratings and principal characteristics	See pages 4-9
Trademark / Brand (if any)	Danfoss iC7
Customer's Testing Facility (CTF) Stage used	CTF2
Model / Type Ref.	iC7 air cooled series, see pages 4-9 for detailed model listing.
Additional information (if necessary may also be reported on page 2)	Type designation and option code, see pages 2 and 3 ☒ Additional Information on page 2
A sample of the product was tested and found to be in conformity with	IEC 61800-5-1:2007, IEC 61800-5-1:2007/AMD1:2016 National Differences: -
As shown in the Test Report Ref. No. which forms part of this Certificate	HELES2101000034-1

This CB Test Certificate is issued by the National Certification Body

SGS Fimko Ltd
Takomotie 8
FI-00380 Helsinki, Finland

Date: 2024-08-23

Signature:

Timo Leismala
Team Leader, EMC & RF

Additional information:

Description of the model code for enclosed drives:

Code	Description
iC7-60	**Product group**
EA	**Product category** EA = air-cooled enclosed drive
3A	**Product type** 3N = three-phase 6-pulse 3A = three-phase AFE (regenerative) 3H = three-phase LHD (low-harmonic)
05	**Voltage rating** 05 = 380–500 VAC
-880A	**Current rating (IL (1/5))** -880A = 880 A -1260A = 1260 A
E21	**Protection rating** E21 = IP21/UL type 1 E54 = IP54/UL type 12
F4	**EMC level** F3 = C3 industry compliance F4 = C4 system component
+XXXX	**Options**

Options (+XXXX):

Option Group +Gxxx includes cabinet input options.
Mains input devices:
+GAXX: No input device
+GACO: Mains contactor (and disconnect switch)
+GACB: Air circuit breaker fixed
+GAMS: Mains disconnect switch
+GACW: Air circuit breaker withdrawable
Earthing devices:
+GCXX: No provisions
+GCEP: Provision for temporary earthing device
+GCES: Earthing Switch

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Additional information:

Options (+XXXX):
Option Group +Ixxx includes cabinet auxiliary options.
+IAXX: No motor heater control
+IAMH: Motor heater control
+IBXX: No cabinet heater
+IBCH: Cabinet heater
+ICXX: No motor fan control
+ICFC: Motor fan control only
+ICF1-4: Motor fan control and power
+IDXX: No motor brake control
+IDBC: Motor brake control included
+IDBS: Motor brake control and supply
+IFXX: No 24 VDC power supply
+IFCS: 24VDC power supply
+IGXX: No 230 VAC socket
+IGS0: 230VAC Socket included
+IGS2: 230VAC Socket included
+IHAS: Aux AC supply terminals
+IHAT: Aux AC voltage transformer
+ILSS: STO/SS1 push button on door

Option Group +Kxxx includes cabinet mechanical options not relevant for electrical safety such as door opening directions and upper cabling options.
+KCIT: Input upper cabling option
+KDOT: Output upper cabling option

Option Group +Mxxx includes cabinet output options.
+MAXX: None
+MAC2: Common mode filter
+MAU1: dU/dt filter without common mode
+MAU2: dU/dt filter with common mode filter

Option Group +Oxxx includes cabinet cooling options.
+OAXX: No air-cooling option
+OAOF: Cooling air outlet flange
+OABC: Back-channel cooling

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Additional information:

Ratings of the enclosed drives:

Current Ratings for Regenerative AFE, 400 V AC

Model code	Frame	Nominal ratings			Low overload		High overload		Typical motor power, 400 V AC	
		$I_{N\text{-}in}$ [A]	I_N [A]	I_{peak} [A]	$I_{L\text{-}in}$ [A]	I_L [A]	$I_{H\text{-}in}$ [A]	I_H [A]	P_L [kW]	P_H [kW]
iC7-60EA3A05-385A	AE10+IE10	325	394	510	317	385	254	300	200	160
iC7-60EA3A05-480A	AE10+IE10	403	490	655	394	480	317	385	250	200
iC7-60EA3A05-590A	AE10+IE10	508	603	816	497	590	394	480	315	250
iC7-60EA3A05-658A	AE11+IE11	571	672	930	559	658	394	547	355	250
iC7-60EA3A05-730A	AE11+IE11	647	746	1031	633	730	499	606	400	315
iC7-60EA3A05-820A	AE11+IE11	728	838	1158	712	820	562	681	450	355
iC7-60EA3A05-880A	AE11+IE11	809	899	1243	791	880	633	731	500	400
iC7-60EA3A05-1000	2 x AE10+ 2 x IE10	905	1021	1411	886	1000	712	830	560	450
iC7-60EA3A05-1100	2 x AE10+ 2 x IE10	1018	1123	1553	997	1100	791	913	630	500
iC7-60EA3A05-1260	2 x AE11+ 2 x IE11	1148	1287	1785	1123	1260	886	1050	710	560
iC7-60EA3A05-1450	2 x AE11+ 2 x IE11	1293	1481	2057	1265	1450	997	1210	800	630
iC7-60EA3A05-1710	2 x AE11+ 2 x IE11	1453	1746	2414	1423	1710	1123	1420	900	710

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Additional information:

Current Ratings for Regenerative AFE, UL, 460 V AC

Model code	Frame	Nominal ratings			Low overload		High overload		Typical motor power, 480 V AC	
		$I_{N\text{-}in}$ [A]	I_N [A]	I_{peak} [A]	$I_{L\text{-}in}$ [A]	I_L [A]	$I_{H\text{-}in}$ [A]	I_H [A]	P_L [kW]	P_H [kW]
iC7-60EA3A05-385A	AE10+IE10	303	372	510	296	364	247	300	300	250
iC7-60EA3A05-480A	AE10+IE10	352	466	619	344	456	296	364	350	300
iC7-60EA3A05-590A	AE10+IE10	451	531	776	441	520	344	456	450	350
iC7-60EA3A05-658A	AE11+IE11	500	603	833	489	590	344	490	500	350
iC7-60EA3A05-730A	AE11+IE11	554	672	930	542	658	443	547	550	450
iC7-60EA3A05-820A	AE11+IE11	604	746	1031	591	730	492	606	600	500
iC7-60EA3A05-880A	AE11+IE11	704	838	1158	688	820	542	681	700	550
iC7-60EA3A05-1000	2 x AE10+ 2 x IE10	755	940	1299	738	920	591	764	750	600
iC7-60EA3A05-1100	2 x AE10+ 2 x IE10	855	1052	1454	837	1030	640	855	850	650
iC7-60EA3A05-1260	2 x AE11+ 2 x IE11	955	1174	1632	935	1150	738	960	950	750
iC7-60EA3A05-1450	2 x AE11+ 2 x IE11	1106	1328	1836	1082	1300	837	1080	1100	850
iC7-60EA3A05-1710	2 x AE11+ 2 x IE11	1306	1603	2227	1279	1570	1082	1310	1300	1100

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Additional information:

Current Ratings for Regenerative AFE, 500 V AC

Model code	Frame	Nominal ratings			Low overload		High overload		Typical motor power, 500 V AC	
		$I_{N\text{-}in}$ [A]	I_N [A]	I_{peak} [A]	$I_{L\text{-}in}$ [A]	I_L [A]	$I_{H\text{-}in}$ [A]	I_H [A]	P_L [kW]	P_H [kW]
iC7-60EA3A05-385A	AE10+IE10	322	372	510	315	364	254	300	250	200
iC7-60EA3A05-480A	AE10+IE10	406	466	619	397	456	315	364	315	250
iC7-60EA3A05-590A	AE10+IE10	457	531	776	447	520	397	456	355	315
iC7-60EA3A05-658A	AE11+IE11	518	603	833	506	590	399	490	400	315
iC7-60EA3A05-730A	AE11+IE11	583	672	930	570	658	450	547	450	355
iC7-60EA3A05-820A	AE11+IE11	647	746	1031	633	730	506	606	500	400
iC7-60EA3A05-880A	AE11+IE11	725	838	1158	709	820	570	681	560	450
iC7-60EA3A05-1000	2 x AE10+ 2 x IE10	815	940	1299	797	920	633	764	630	500
iC7-60EA3A05-1100	2 x AE10+ 2 x IE10	919	1052	1454	899	1030	709	855	710	560
iC7-60EA3A05-1260	2 x AE11+ 2 x IE11	1034	1174	1632	1012	1150	797	960	800	630
iC7-60EA3A05-1450	2 x AE11+ 2 x IE11	1164	1328	1836	1139	1300	899	1080	900	710
iC7-60EA3A05-1710	2 x AE11+ 2 x IE11	1422	1603	2227	1392	1570	1012	1310	1100	800

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Additional information:

Current Ratings for Low-harmonic AFE, 400 V AC

Model code	Frame	Nominal ratings			Low overload		High overload		Typical motor power, 400 V AC	
		$I_{N\text{-}in}$ [A]	I_N [A]	I_{peak} [A]	$I_{L\text{-}in}$ [A]	I_L [A]	$I_{H\text{-}in}$ [A]	I_H [A]	P_L [kW]	P_H [kW]
iC7-60EA3H05-385A	AE10+IE10	325	394	510	317	385	254	300	200	160
iC7-60EA3H05-480A	AE10+IE10	403	490	655	394	480	317	385	250	200
iC7-60EA3H05-590A	AE10+IE10	508	603	816	497	590	394	480	315	250
iC7-60EA3H05-658A	AE11+IE11	571	672	930	559	658	394	547	355	250
iC7-60EA3H05-730A	AE11+IE11	647	746	1031	633	730	499	606	400	315
iC7-60EA3H05-820A	AE11+IE11	728	838	1158	712	820	562	681	450	355
iC7-60EA3H05-880A	AE11+IE11	809	899	1243	791	880	633	731	500	400
iC7-60EA3H05-1000	2 x AE10+ 2 x IE10	905	1021	1411	886	1000	712	830	560	450
iC7-60EA3H05-1100	2 x AE10+ 2 x IE10	1018	1123	1553	997	1100	791	913	630	500
iC7-60EA3H05-1260	2 x AE11+ 2 x IE11	1148	1287	1785	1123	1260	886	1050	710	560
iC7-60EA3H05-1450	2 x AE11+ 2 x IE11	1293	1481	2057	1265	1450	997	1210	800	630
iC7-60EA3H05-1710	2 x AE11+ 2 x IE11	1453	1746	2414	1423	1710	1123	1420	900	710

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Additional information:

Current Ratings for Low-harmonic AFE, UL, 460 V AC

Model code	Frame	Nominal ratings			Low overload		High overload		Typical motor power, 480 V AC	
		$I_{N\text{-}in}$ [A]	I_N [A]	I_{peak} [A]	$I_{L\text{-}in}$ [A]	I_L [A]	$I_{H\text{-}in}$ [A]	I_H [A]	P_L [kW]	P_H [kW]
iC7-60EA3H05-385A	AE10+IE10	303	372	510	296	364	247	300	300	250
iC7-60EA3H05-480A	AE10+IE10	352	466	619	344	456	296	364	350	300
iC7-60EA3H05-590A	AE10+IE10	451	531	776	441	520	344	456	450	350
iC7-60EA3H05-658A	AE11+IE11	500	603	833	489	590	344	490	500	350
iC7-60EA3H05-730A	AE11+IE11	554	672	930	542	658	443	547	550	450
iC7-60EA3H05-820A	AE11+IE11	604	746	1031	591	730	492	606	600	500
iC7-60EA3H05-880A	AE11+IE11	704	838	1158	688	820	542	681	700	550
iC7-60EA3H05-1000	2 x AE10+ 2 x IE10	755	940	1299	738	920	591	764	750	600
iC7-60EA3H05-1100	2 x AE10+ 2 x IE10	855	1052	1454	837	1030	640	855	850	650
iC7-60EA3H05-1260	2 x AE11+ 2 x IE11	955	1174	1632	935	1150	738	960	950	750
iC7-60EA3H05-1450	2 x AE11+ 2 x IE11	1106	1328	1836	1082	1300	837	1080	1100	850
iC7-60EA3H05-1710	2 x AE11+ 2 x IE11	1306	1603	2227	1279	1570	1082	1310	1300	1100

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Additional information:

Current Ratings for Low-harmonic AFE, 500 V AC

Model code	Frame	Nominal ratings			Low overload		High overload		Typical motor power, 500 V AC	
		$I_{N\text{-}in}$ [A]	I_N [A]	I_{peak} [A]	$I_{L\text{-}in}$ [A]	I_L [A]	$I_{H\text{-}in}$ [A]	I_H [A]	P_L [kW]	P_H [kW]
iC7-60EA3H05-385A	AE10+IE10	322	372	510	315	364	254	300	250	200
iC7-60EA3H05-480A	AE10+IE10	406	466	619	397	456	315	364	315	250
iC7-60EA3H05-590A	AE10+IE10	457	531	776	447	520	397	456	355	315
iC7-60EA3H05-658A	AE11+IE11	518	603	833	506	590	399	490	400	315
iC7-60EA3H05-730A	AE11+IE11	583	672	930	570	658	450	547	450	355
iC7-60EA3H05-820A	AE11+IE11	647	746	1031	633	730	506	606	500	400
iC7-60EA3H05-880A	AE11+IE11	725	838	1158	709	820	570	681	560	450
iC7-60EA3H05-1000	2 x AE10+ 2 x IE10	815	940	1299	797	920	633	764	630	500
iC7-60EA3H05-1100	2 x AE10+ 2 x IE10	919	1052	1454	899	1030	709	855	710	560
iC7-60EA3H05-1260	2 x AE11+ 2 x IE11	1034	1174	1632	1012	1150	797	960	800	630
iC7-60EA3H05-1450	2 x AE11+ 2 x IE11	1164	1328	1836	1139	1300	899	1080	900	710
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