

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

Danfoss Drives Oy  
Runsorintie 7  
FI-65380 Vaasa, Finland

Note: When more than one factory, please report on page 2

 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)

 Additional Information on page 2

Type designation and option code, see pages 2 and 3

A sample of the product was tested and found to be in conformity with

IEC 62477-1:2012

IEC 62477-1:2012/AMD1:2016

National Differences:

-

HELES2101000034-2

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

**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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FI-58753

**Additional information:**

Ratings of the enclosed drives / power converters:

Current Ratings for Regenerative AFE, 400 V AC

Model code	Frame	Nominal ratings			Low overload		High overload		Typical motor power, 400 V AC	
		$I_{N-in}$ [A]	$I_N$ [A]	$I_{peak}$ [A]	$I_{L-in}$ [A]	$I_L$ [A]	$I_{H-in}$ [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	
		$I_{N-in}$ [A]	$I_N$ [A]	$I_{peak}$ [A]	$I_{L-in}$ [A]	$I_L$ [A]	$I_{H-in}$ [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	
		$I_{N-in}$ [A]	$I_N$ [A]	$I_{peak}$ [A]	$I_{L-in}$ [A]	$I_L$ [A]	$I_{H-in}$ [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	
		$I_{N-in}$ [A]	$I_N$ [A]	$I_{peak}$ [A]	$I_{L-in}$ [A]	$I_L$ [A]	$I_{H-in}$ [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	
		$I_{N-in}$ [A]	$I_N$ [A]	$I_{peak}$ [A]	$I_{L-in}$ [A]	$I_L$ [A]	$I_{H-in}$ [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
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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	
		$I_{N-in}$ [A]	$I_N$ [A]	$I_{peak}$ [A]	$I_{L-in}$ [A]	$I_L$ [A]	$I_{H-in}$ [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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