

Inverter data according to EU regulation 2019/1781

Content of this document:

This document lists the data according to the European regulation EU 2019/1781 for the frequency inverter series

ACT201 / ACT401

The reference numbers set in the regulation are shown also in this document as follows:

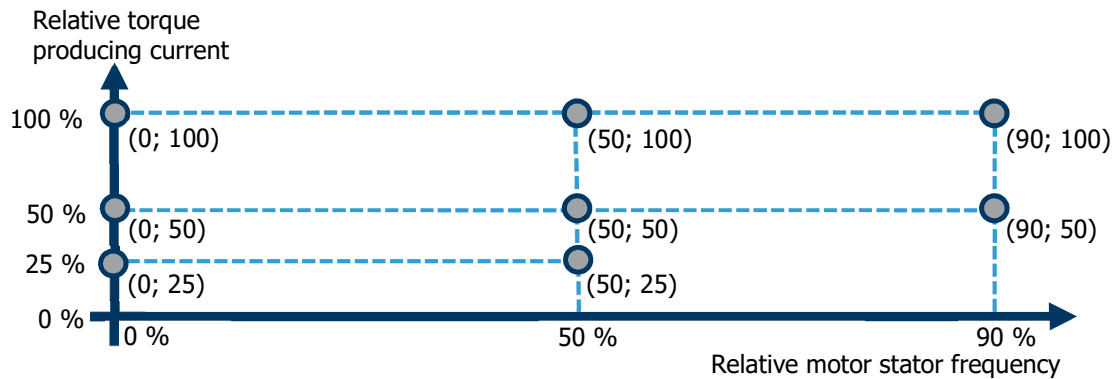
(1)	Power losses in % of the rated apparent output power at the following different operating points for relative motor stator frequency versus relative torque-producing current (0;25) (0;50) (0;100) (50;25) (50;50) (50;100) (90;50) (90;100) Standby losses
(2)	Efficiency level
(3)	Manufacturer's name, commercial registration number and address
(4)	Product's model identifier
(5)	Apparent output power [kVA]
(6)	Indicative motor rated power output [kW]
(7)	Rated output current [A]
(8)	Maximum operating temperature [°C] – <i>Note: Max. environment temperature; For temperature derating check the operating instructions</i>
(9)	Rated supply frequency [Hz]
(10)	Rated supply voltage [V] / Mains voltage [V]

Table of Contents according to subseries, mains voltage, mounting version and frame sizes:

Series	Mains Voltage	Mounting Version	Frame Size(s)	Page
ACT201	3 ~ 230 V ¹⁾	A: Air Cooling	1,2,3,4	2
		C: ColdPlate	1,2,3,4	3
ACT401	3 ~ 400 V	A: Air Cooling	1,2,3,4	4
			5,6,7	5
		C: ColdPlate	1,2,3,4,5	6

- 1) ACT201 devices can also be operated in single phase 230 V mains installations. The data in the following tables consider the operation for three phase 230 V mains operations

Inverter data according to EU regulation 2019/1781



(D)	Device ¹⁾	Frame Size	f _{PWM} [kHz]	(1)								P _{Loss Standby} [W]	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Power losses Relative [%] ²⁾																	
				(0;25)	(0;50)	(0;100)	(50;25)	(50;50)	(50;100)	(90;50)	(90;100)										
ACT201-05 FA	1	4	1.8	1.8	2.1	1.9	2	2.3	2.1	2.5	10	IE2	³⁾	⁴⁾	1.2	0.55	3	55	⁵⁾	230	
ACT201-07 FA	1	4	1.3	1.5	1.9	1.4	1.6	2.1	1.7	2.4	10	IE2	³⁾	⁴⁾	1.6	0.75	4	55	⁵⁾	230	
ACT201-09 FA	1	4	1.2	1.3	1.8	1.2	1.5	2.1	1.6	2.3	10	IE2	³⁾	⁴⁾	2.2	1.1	5.4	55	⁵⁾	230	
ACT201-11 FA	2	4	1.5	1.7	2.1	1.6	1.9	2.5	2	2.8	11.7	IE2	³⁾	⁴⁾	2.8	1.5	7	55	⁵⁾	230	
ACT201-13 FA	2	4	1.5	1.6	2.1	1.5	1.8	2.5	2	2.8	11.7	IE2	³⁾	⁴⁾	3.8	2.2	9.5	55	⁵⁾	230	
ACT201-15 FA	2	4	1.4	1.6	2.1	1.5	1.8	2.6	2	3	11.7	IE2	³⁾	⁴⁾	5	3	12.5	55	⁵⁾	230	
ACT201-18 FA	3	4	1.9	2.1	2.6	1.9	2.2	2.9	2.3	3.2	16.3	IE2	³⁾	⁴⁾	7.2	4	18	55	⁵⁾	230	
ACT201-19 FA	3	4	1.6	1.8	2.6	1.6	1.9	2.9	2.1	3.3	16.3	IE2	³⁾	⁴⁾	8.8	5.5	22	55	⁵⁾	230	
ACT201-21 A	4	4	1.4	1.6	2.4	1.4	1.7	2.6	1.9	2.9	19	IE2	³⁾	⁴⁾	12.7	7.5	32	55	⁵⁾	230	
ACT201-22 A	4	4	1.3	1.6	2.4	1.4	1.7	2.6	1.8	3	19	IE2	³⁾	⁴⁾	13.9	9.2	35	55	⁵⁾	230	

1) The table shows the type designation of the typical variant of the series.

2) Relative power losses relate to the Nominal Apparent power.

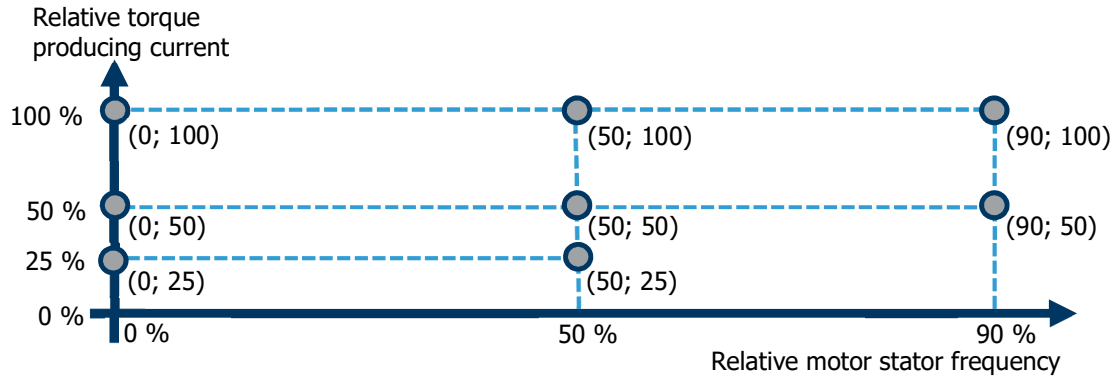
3) Manufacturer: Bonfiglioli Deutschland GmbH Europark Fichtenhain B6
Register Court Neuss, HRB 9981 D-47807 Krefeld

4) See column (D) Device

5) f_{supply} : 50/60 Hz (±10 %)

6) V_{supply} :400: AC 3~320...480 (+10%) V 230: AC 3~184...240 V (+10 %)

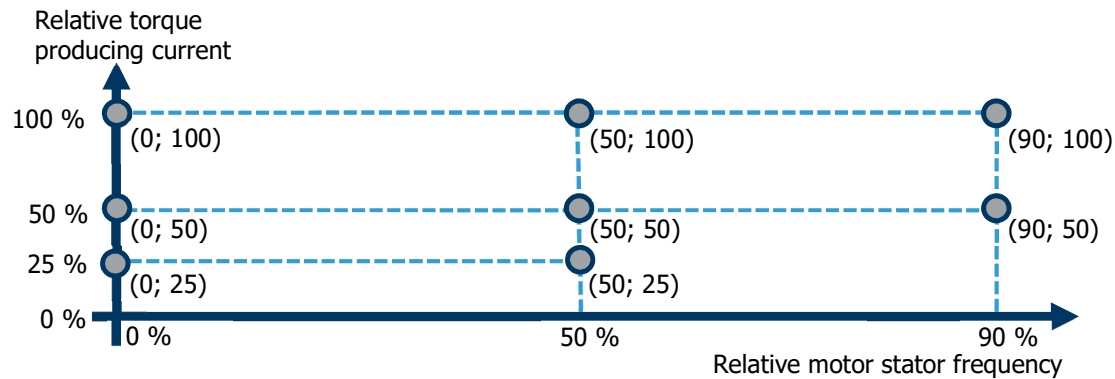
Inverter data according to EU regulation 2019/1781



(D)	Device ¹⁾	Frame Size	f _{PWM} [kHz]	(1)								P _{Loss Standby} [W]	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				Power losses Relative [%] ²⁾																	
				(0;25)	(0;50)	(0;100)	(50;25)	(50;50)	(50;100)	(90;50)	(90;100)										
	ACT201-05 FC	1	4	1.8	1.8	2.1	1.9	2	2.3	2.1	2.5	10	IE2	³⁾	⁴⁾	1.2	0.55	3	55	⁵⁾	230
	ACT201-07 FC	1	4	1.3	1.5	1.9	1.4	1.6	2.1	1.7	2.4	10	IE2	³⁾	⁴⁾	1.6	0.75	4	55	⁵⁾	230
	ACT201-09 FC	1	4	1.2	1.3	1.8	1.2	1.5	2.1	1.6	2.3	10	IE2	³⁾	⁴⁾	2.2	1.1	5.4	55	⁵⁾	230
	ACT201-11 FC	2	4	1.2	1.3	1.8	1.2	1.5	2.1	1.6	2.4	11.7	IE2	³⁾	⁴⁾	2.8	1.5	7	55	⁵⁾	230
	ACT201-13 FC	2	4	1.1	1.3	1.7	1.2	1.4	2.1	1.6	2.4	11.7	IE2	³⁾	⁴⁾	3.8	2.2	9.5	55	⁵⁾	230
	ACT201-15 FC	2	4	1	1.2	1.7	1.1	1.4	2.1	1.6	2.5	11.7	IE2	³⁾	⁴⁾	5	3	12.5	55	⁵⁾	230
	ACT201-18 FC	3	4	1.4	1.6	2.2	1.5	1.8	2.5	1.9	2.8	16.3	IE2	³⁾	⁴⁾	7.2	4	18	55	⁵⁾	230
	ACT201-19 FC	3	4	1.1	1.4	2.2	1.2	1.5	2.5	1.6	2.8	16.3	IE2	³⁾	⁴⁾	8.8	5.5	22	55	⁵⁾	230
	ACT201-21 C	4	4	0.9	1.2	2	1	1.3	2.2	1.4	2.5	19	IE2	³⁾	⁴⁾	12.7	7.5	32	55	⁵⁾	230
	ACT201-22 C	4	4	0.9	1.2	2	1	1.3	2.2	1.4	2.6	19	IE2	³⁾	⁴⁾	13.9	9.2	35	55	⁵⁾	230

- 1) The table shows the type designation of the typical variant of the series.
- 2) Relative power losses relate to the Nominal Apparent power.
- 3) Manufacturer: Bonfiglioli Deutschland GmbH Europark Fichtenhain B6
Register Court Neuss, HRB 9981 D-47807 Krefeld
- 4) See column (D) Device
- 5) f_{supply} : 50/60 Hz (±10 %)
- 6) V_{supply} : 400: AC 3~320...480 (+10%) V 230: AC 3~184...240 V (+10 %)

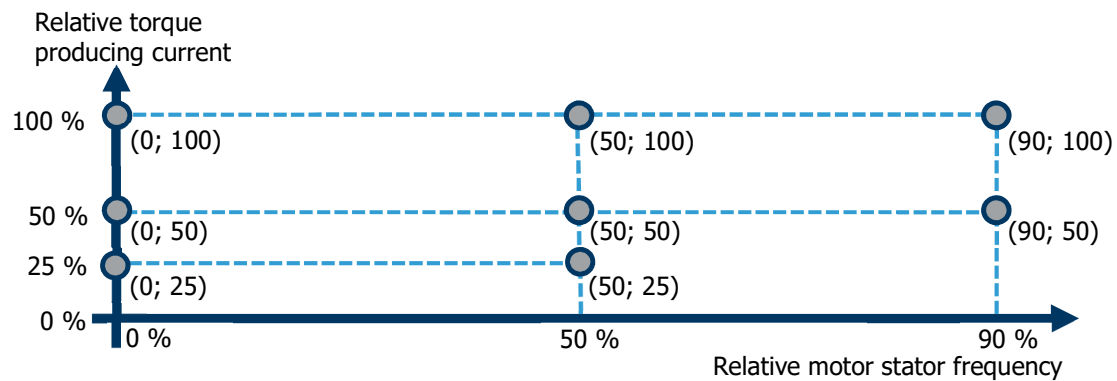
Inverter data according to EU regulation 2019/1781



(D) Device ¹⁾	Frame Size	f _{PWM} [kHz]	(1) Power losses Relative [%] ²⁾									(2) IE class	(3) Manufacturer	(4) Model ID	(5) S _{rated} [kVA]	(6) P _{rated} [kW]	(7) I _{rated} [A]	(8) Max. T [°C]	(9) f _{supply} [Hz] ⁵⁾	(10) V _{supply} [V] ⁶⁾
			(0;25)	(0;50)	(0;100)	(50;25)	(50;50)	(50;100)	(90;50)	(90;100)	P _{Loss Standby} [W]									
ACT401-05 FA	1	4	1.8	1.8	2	1.9	1.9	2.1	2	2.2	10	IE2	³⁾	⁴⁾	1.2	0.55	1.8	55	⁵⁾	400
ACT401-07 FA	1	4	1.3	1.4	1.7	1.4	1.5	1.8	1.6	2	10	IE2	³⁾	⁴⁾	1.7	0.75	2.4	55	⁵⁾	400
ACT401-09 FA	1	4	1.1	1.2	1.5	1.1	1.3	1.6	1.4	1.8	10	IE2	³⁾	⁴⁾	2.2	1.1	3.2	55	⁵⁾	400
ACT401-11 FA	1	4	1	1.1	1.4	1	1.2	1.5	1.3	1.7	10	IE2	³⁾	⁴⁾	2.6	1.5	3.8	55	⁵⁾	400
ACT401-12 FA	2	4	1.3	1.4	1.6	1.3	1.4	1.8	1.5	1.9	11.7	IE2	³⁾	⁴⁾	2.9	1.85	4.2	55	⁵⁾	400
ACT401-13 FA	2	4	1.1	1.2	1.5	1.2	1.3	1.7	1.4	1.8	11.7	IE2	³⁾	⁴⁾	4	2.2	5.8	55	⁵⁾	400
ACT401-15 FA	2	4	1.1	1.2	1.5	1.1	1.2	1.6	1.3	1.8	11.7	IE2	³⁾	⁴⁾	5.4	3	7.8	55	⁵⁾	400
ACT401-18 FA	2	4	1	1.2	1.4	1.1	1.2	1.6	1.3	1.8	11.7	IE2	³⁾	⁴⁾	6.2	4	9	55	⁵⁾	400
ACT401-19 FA	3	4	1.4	1.5	2	1.4	1.6	2.2	1.7	2.4	16.3	IE2	³⁾	⁴⁾	9.7	5.5	14	55	⁵⁾	400
ACT401-21 FA	3	4	1.2	1.4	1.9	1.3	1.5	2.1	1.6	2.3	16.3	IE2	³⁾	⁴⁾	12.5	7.5	18	55	⁵⁾	400
ACT401-22 FA	3	4	1.2	1.3	1.9	1.2	1.4	2.1	1.5	2.3	16.3	IE2	³⁾	⁴⁾	15.2	9.2	22	55	⁵⁾	400
ACT401-19 A	3	4	1.4	1.5	2	1.4	1.6	2.2	1.7	2.4	16.3	IE2	³⁾	⁴⁾	9.7	5.5	14	55	⁵⁾	400
ACT401-21 A	3	4	1.2	1.4	1.9	1.3	1.5	2.1	1.6	2.3	16.3	IE2	³⁾	⁴⁾	12.5	7.5	18	55	⁵⁾	400
ACT401-22 A	3	4	1.2	1.3	1.9	1.2	1.4	2.1	1.5	2.3	16.3	IE2	³⁾	⁴⁾	15.2	9.2	22	55	⁵⁾	400
ACT401-23 A	4	4	1.1	1.3	1.8	1.1	1.3	1.9	1.4	2.1	19	IE2	³⁾	⁴⁾	17.3	11	25	55	⁵⁾	400
ACT401-25 A	4	4	1	1.2	1.7	1	1.3	1.9	1.3	2.1	19	IE2	³⁾	⁴⁾	22.2	15	32	55	⁵⁾	400
ACT401-26 A	4	4	1	1.2	1.7	1	1.2	1.9	1.3	2.1	19	IE2	³⁾	⁴⁾	24.2	18.5	35	55	⁵⁾	400

- 1) The table shows the type designation of the typical variant of the series.
- 2) Relative power losses relate to the Nominal Apparent power.
- 3) Manufacturer: Bonfiglioli Deutschland GmbH Europark Fichtenhain B6
Register Court Neuss, HRB 9981 D-47807 Krefeld
- 4) See column (D) Device
- 5) f_{supply} : 50/60 Hz (±10 %)
- 6) V_{supply} : 400: AC 3~320...480 (+10%) V 230: AC 3~184...240 V (+10 %)

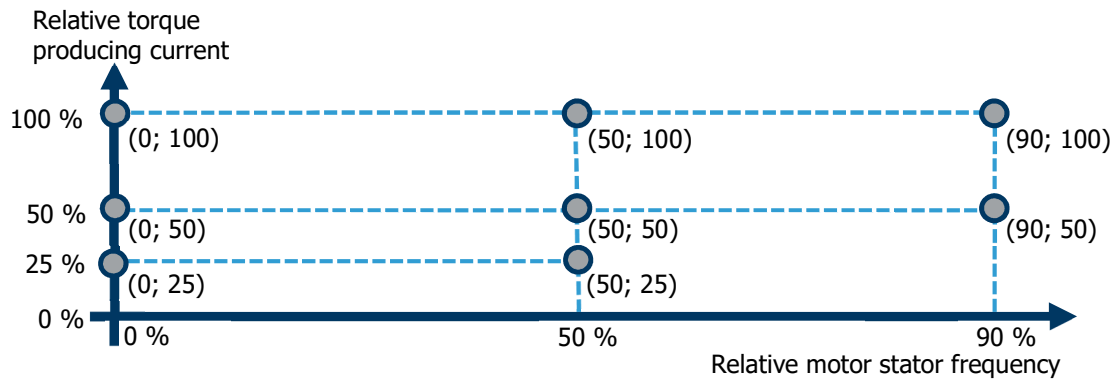
Inverter data according to EU regulation 2019/1781



(D)	Frame Size	f _{PWM} [kHz]	(1)										(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			Power losses Relative [%] ²⁾																		
			(0;25)	(0;50)	(0;100)	(50;25)	(50;50)	(50;100)	(90;50)	(90;100)	P _{Loss Standby} [W]										
Device ¹⁾											IE class	Manufacturer	Model ID	S _{rated} [kVA]	P _{rated} [kW]	I _{rated} [A]	Max. T [°C]	f _{supply} [Hz] ⁵⁾	V _{supply} [V] ⁶⁾		
ACT401-27 A	5	4	0.9	1	1.5	0.9	1.1	1.6	1.2	1.8	28.7	IE2	³⁾	⁴⁾	27.7	18.5	40	55	⁵⁾	400	
ACT401-29 A	5	4	0.9	1	1.5	0.9	1.1	1.6	1.2	1.8	28.7	IE2	³⁾	⁴⁾	31.2	22	45	55	⁵⁾	400	
ACT401-31 A	5	4	0.8	1	1.4	0.9	1	1.6	1.1	1.8	28.7	IE2	³⁾	⁴⁾	41.6	30	60	55	⁵⁾	400	
ACT401-33 A	6	4	0.9	1.1	1.5	0.9	1.1	1.7	1.2	1.9	49	IE2	³⁾	⁴⁾	52	37	75	55	⁵⁾	400	
ACT401-35 A	6	4	0.8	1	1.5	0.9	1.1	1.7	1.1	1.8	49	IE2	³⁾	⁴⁾	62.4	45	90	55	⁵⁾	400	
ACT401-37 A	6	4	0.8	1	1.5	0.8	1	1.6	1.1	1.8	49	IE2	³⁾	⁴⁾	76.2	55	110	55	⁵⁾	400	
ACT401-39 A	6	4	0.8	1	1.5	0.8	1	1.6	1.1	1.8	49	IE2	³⁾	⁴⁾	86.6	65	125	55	⁵⁾	400	
ACT401-43 A	7	4	0.7	0.9	1.3	0.7	0.9	1.5	1	1.7	49.5	IE2	³⁾	⁴⁾	104	75	150	55	⁵⁾	400	
ACT401-45 A	7	2	0.5	0.6	1	0.5	0.7	1.1	0.8	1.3	49.5	IE2	³⁾	⁴⁾	125	90	180	55	⁵⁾	400	
ACT401-47 A	7	2	0.5	0.6	1	0.5	0.7	1.2	0.8	1.4	49.5	IE2	³⁾	⁴⁾	145	110	210	55	⁵⁾	400	
ACT401-49 A	7	2	0.5	0.6	1.1	0.5	0.7	1.2	0.8	1.4	49.5	IE2	³⁾	⁴⁾	173	132	250	55	⁵⁾	400	

- 1) The table shows the type designation of the typical variant of the series.
- 2) Relative power losses relate to the Nominal Apparent power.
- 3) Manufacturer: Bonfiglioli Deutschland GmbH Europark Fichtenhain B6
Register Court Neuss, HRB 9981 D-47807 Krefeld
- 4) See column (D) Device
- 5) f_{supply} : 50/60 Hz (±10 %)
- 6) V_{supply} : 400: AC 3~320...480 (+10%) V 230: AC 3~184...240 V (+10 %)

Inverter data according to EU regulation 2019/1781



(D)	Frame Size	f _{PWM} [kHz]	(1)									P _{Loss Standby} [W]	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			Power losses Relative [%] ²⁾																		
			(0;25)	(0;50)	(0;100)	(50;25)	(50;50)	(50;100)	(90;50)	(90;100)											
Device ¹⁾											IE class	Manufacturer	Model ID	S _{rated} [kVA]	P _{rated} [kW]	I _{rated} [A]	Max. T [°C]	f _{supply} [Hz] ⁵⁾	V _{supply} [V] ⁶⁾		
ACT401-05 FC	1	4	1.8	1.8	2	1.9	1.9	2.1	2	2.2	10	IE2	³⁾	⁴⁾	1.2	0.55	1.8	55	⁵⁾	400	
ACT401-07 FC	1	4	1.3	1.4	1.7	1.4	1.5	1.8	1.6	2	10	IE2	³⁾	⁴⁾	1.7	0.75	2.4	55	⁵⁾	400	
ACT401-09 FC	1	4	1.1	1.2	1.5	1.1	1.3	1.6	1.4	1.8	10	IE2	³⁾	⁴⁾	2.2	1.1	3.2	55	⁵⁾	400	
ACT401-11 FC	1	4	1	1.1	1.4	1	1.2	1.5	1.3	1.7	10	IE2	³⁾	⁴⁾	2.6	1.5	3.8	55	⁵⁾	400	
ACT401-12 FC	2	4	1	1.1	1.4	1	1.2	1.5	1.2	1.6	11.7	IE2	³⁾	⁴⁾	2.9	1.85	4.2	55	⁵⁾	400	
ACT401-13 FC	2	4	0.9	1	1.3	0.9	1.1	1.4	1.1	1.5	11.7	IE2	³⁾	⁴⁾	4	2.2	5.8	55	⁵⁾	400	
ACT401-15 FC	2	4	0.8	0.9	1.2	0.9	1	1.4	1.1	1.5	11.7	IE2	³⁾	⁴⁾	5.4	3	7.8	55	⁵⁾	400	
ACT401-18 FC	2	4	0.8	0.9	1.2	0.8	1	1.4	1.1	1.5	11.7	IE2	³⁾	⁴⁾	6.2	4	9	55	⁵⁾	400	
ACT401-19 FC	3	4	1	1.2	1.7	1.1	1.3	1.9	1.4	2.1	16.3	IE2	³⁾	⁴⁾	9.7	5.5	14	55	⁵⁾	400	
ACT401-21 FC	3	4	0.9	1.1	1.6	1	1.2	1.8	1.2	2	16.3	IE2	³⁾	⁴⁾	12.5	7.5	18	55	⁵⁾	400	
ACT401-22 FC	3	4	0.8	1	1.6	0.9	1.1	1.8	1.2	2	16.3	IE2	³⁾	⁴⁾	15.2	9.2	22	55	⁵⁾	400	
ACT401-19 C	3	4	1	1.2	1.7	1.1	1.3	1.9	1.4	2.1	16.3	IE2	³⁾	⁴⁾	9.7	5.5	14	55	⁵⁾	400	
ACT401-21 C	3	4	0.9	1.1	1.6	1	1.2	1.8	1.2	2	16.3	IE2	³⁾	⁴⁾	12.5	7.5	18	55	⁵⁾	400	
ACT401-22 C	3	4	0.8	1	1.6	0.9	1.1	1.8	1.2	2	16.3	IE2	³⁾	⁴⁾	15.2	9.2	22	55	⁵⁾	400	
ACT401-23 C	4	4	0.8	1	1.5	0.8	1	1.6	1.1	1.8	19	IE2	³⁾	⁴⁾	17.3	11	25	55	⁵⁾	400	
ACT401-25 C	4	4	0.7	0.9	1.4	0.8	1	1.6	1.1	1.8	19	IE2	³⁾	⁴⁾	22.2	15	32	55	⁵⁾	400	
ACT401-27 C	5	4	0.6	0.8	1.2	0.7	0.9	1.4	0.9	1.6	28.7	IE2	³⁾	⁴⁾	27.7	18.5	40	55	⁵⁾	400	
ACT401-29 C	5	4	0.6	0.8	1.2	0.6	0.8	1.4	0.9	1.6	28.7	IE2	³⁾	⁴⁾	31.2	22	45	55	⁵⁾	400	
ACT401-31 C	5	4	0.6	0.7	1.2	0.6	0.8	1.4	0.9	1.6	28.7	IE2	³⁾	⁴⁾	41.6	30	60	55	⁵⁾	400	

- 1) The table shows the type designation of the typical variant of the series.
- 2) Relative power losses relate to the Nominal Apparent power.
- 3) Manufacturer: Bonfiglioli Deutschland GmbH Europark Fichtenhain B6
Register Court Neuss, HRB 9981 D-47807 Krefeld
- 4) See column (D) Device
- 5) f_{supply} : 50/60 Hz (±10 %)
- 6) V_{supply} : 400: AC 3~320...480 (+10%) V 230: AC 3~184...240 V (+10 %)