



ECO Design: Energy Efficiency Indicator – CDM Compliance to IEC 61800-9-2: 2017

Manufacturer:	Parker Hannifin Manufacturing Germany GmbH & Co KG: Electric Motion & Pneumatic Division																																									
Address:	Robert-Bosch-Str. 22 - 77656 Offenburg (Germany)																																									
Product Series:	AC20 Series Variable Speed Drives																																									
Rated Supply Voltage:	3x 220 – 240Vac +/-10%																																									
Rated Supply Frequency:	50 – 60Hz +/-10%																																									
Duty:	Heavy Duty																				Normal Duty																					
Temperature Rating:	0 – 40°C																				n/a																					
Product Code	P_r (kW)	$I_{r,OUT}$ (A)	$S_{r,eqv}$ (VA)	$P_{L,CDM(0,25)}$ (W)	$p_{L,CDM(0,25)}$ (%)	$P_{L,CDM(50,25)}$ (W)	$p_{L,CDM(50,25)}$ (%)	$P_{L,CDM(0,50)}$ (W)	$p_{L,CDM(0,50)}$ (%)	$P_{L,CDM(50,50)}$ (W)	$p_{L,CDM(50,50)}$ (%)	$P_{L,CDM(90,50)}$ (W)	$p_{L,CDM(90,50)}$ (%)	$P_{L,CDM(0,100)}$ (W)	$p_{L,CDM(0,100)}$ (%)	$P_{L,CDM(50,100)}$ (W)	$p_{L,CDM(50,100)}$ (%)	$P_{L,CDM(90,100)}$ (W)	$p_{L,CDM(90,100)}$ (%)	IE2 Compliant	P_r (kW)	$I_{r,OUT}$ (A)	$S_{r,eqv}$ (VA)	$P_{L,CDM(0,25)}$ (W)	$p_{L,CDM(0,25)}$ (%)	$P_{L,CDM(50,25)}$ (W)	$p_{L,CDM(50,25)}$ (%)	$P_{L,CDM(0,50)}$ (W)	$p_{L,CDM(0,50)}$ (%)	$P_{L,CDM(50,50)}$ (W)	$p_{L,CDM(50,50)}$ (%)	$P_{L,CDM(90,50)}$ (W)	$p_{L,CDM(90,50)}$ (%)	$P_{L,CDM(0,100)}$ (W)	$p_{L,CDM(0,100)}$ (%)	$P_{L,CDM(50,100)}$ (W)	$p_{L,CDM(50,100)}$ (%)	$P_{L,CDM(90,100)}$ (W)	$p_{L,CDM(90,100)}$ (%)	IE2 Compliant	$P_{L,control\ standby}$ (W)	
20G-32-0070-BF	1.5	7.0	2425	74.8	3.1	76.8	3.2	80.3	3.3	84.6	3.5	89.5	3.7	93.7	3.9	103.3	4.3	115.8	4.8	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	
20G-32-0100-BF	2.2	10	3464	105.1	3.0	108.1	3.1	114.3	3.3	120.7	3.5	127.0	3.7	136.6	3.9	150.0	4.3	165.2	4.8	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20G-33-0170-BF	4	17	6478	113.7	1.8	118.8	1.8	128.8	2.0	139.9	2.2	150.9	2.3	167.6	2.6	192.9	3.0	220.2	3.4	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20G-34-0210-BF	5.5	21	8002	95.6	1.2	100.7	1.3	110.9	1.4	121.9	1.5	133.6	1.7	160.0	2.0	186.6	2.3	219.4	2.7	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20G-35-0300-BF	7.5	30	11432	126.3	1.1	133.6	1.2	151.9	1.3	168.2	1.5	187.1	1.6	232.8	2.0	274.6	2.4	331.4	2.9	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20G-35-0400-BF	11	40	15242	168.4	1.1	178.2	1.2	206.9	1.4	228.7	1.5	254.1	1.7	326.1	2.1	381.3	2.5	456.9	3.0	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20

Table Abbreviations:

- P_r = Rated drive power (expressed in kiloWatts)
- $I_{r,OUT}$ = Rated drive output current (expressed in Amps)
- $S_{r,eqv}$ = Rated apparent drive output power (expressed in Volt-Amperes)
- $P_{L,CDM(X,Y)}$ = absolute power losses, CDM associated, in operating condition (X, Y), where X = Motor stator frequency (%) and Y = Torque producing current (%), (expressed in Watts)
- $p_{L,CDM(X,Y)}$ = relative power losses, CDM associated, in operating condition (X, Y), where X = Motor stator frequency (%) and Y = Torque producing current (%), (expressed as a Percentage)
- $P_{L,control\ standby}$ = Power losses, control board associated, when CDM is in standby mode (expressed in Watts)

Notes:

- All calculations performed at nominal 220V, 50Hz supply, using the default switching frequency of the drive rating. See Product Manual DOC-0017-04 for values.
- Products do not have a Normal Duty rating.



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Rated Supply Voltage:	3x 380 – 480Vac +/-10%																																									
Rated Supply Frequency:	50 – 60Hz +/-10%																																									
Duty:	Heavy Duty																				Normal Duty																					
Temperature Rating:	0 – 40°C																				n/a																					
Product Code	P _r (kW)	I _{r, OUT} (A)	S _{r, equ} (VA)	P _{L, CDM} (0,25) (W)	p _{L, CDM} (0,25) (%)	P _{L, CDM} (50,25) (W)	p _{L, CDM} (50,25) (%)	P _{L, CDM} (0,50) (W)	p _{L, CDM} (0,50) (%)	P _{L, CDM} (50,50) (W)	p _{L, CDM} (50,50) (%)	P _{L, CDM} (90,50) (W)	p _{L, CDM} (90,50) (%)	P _{L, CDM} (0,100) (W)	p _{L, CDM} (0,100) (%)	P _{L, CDM} (50,100) (W)	p _{L, CDM} (50,100) (%)	P _{L, CDM} (90,100) (W)	p _{L, CDM} (90,100) (%)	IE2 Compliant	P _r (kW)	I _{r, OUT} (A)	S _{r, equ} (VA)	P _{L, CDM} (0,25) (W)	p _{L, CDM} (0,25) (%)	P _{L, CDM} (50,25) (W)	p _{L, CDM} (50,25) (%)	P _{L, CDM} (0,50) (W)	p _{L, CDM} (0,50) (%)	P _{L, CDM} (50,50) (W)	p _{L, CDM} (50,50) (%)	P _{L, CDM} (90,50) (W)	p _{L, CDM} (90,50) (%)	P _{L, CDM} (0,100) (W)	p _{L, CDM} (0,100) (%)	P _{L, CDM} (50,100) (W)	p _{L, CDM} (50,100) (%)	P _{L, CDM} (90,100) (W)	p _{L, CDM} (90,100) (%)	IE2 Compliant	P _{L, control standby} (W)	
20x-42-0040-BF	1.5	4	2771	82.6	3.0	83.5	3.0	88.3	3.2	90.0	3.2	91.6	3.3	101.8	3.7	105.3	3.8	130.6	4.7	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20x-42-0065-BF	2.2	6.5	4503	110.5	2.5	112.5	2.5	120.1	2.7	125.0	2.8	132.1	2.9	143.5	3.2	156.2	3.5	212.3	4.7	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20x-42-0090-BF	4	9	6235	137.9	2.2	140.7	2.3	150.0	2.4	156.5	2.5	164.9	2.6	179.1	2.9	194.8	3.1	218.0	3.5	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20x-43-0120-BF	5.5	12	8314	163.5	2.0	166.3	2.0	182.4	2.2	188.8	2.3	196.5	2.4	237.6	2.9	254.6	3.1	278.2	3.3	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20x-43-0170-BF	7.5	17	11778	190.0	1.6	194.6	1.7	219.1	1.9	229.8	2.0	242.0	2.1	305.5	2.6	334.2	2.8	372.0	3.2	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20x-44-0230-BF	11	23	15935	178.6	1.1	186.1	1.2	211.4	1.3	227.4	1.4	244.7	1.5	310.6	1.9	349.5	2.2	398.3	2.5	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20x-44-0320-BF	15	32	22170	210.8	1.0	220.8	1.0	256.1	1.2	278.1	1.3	303.0	1.4	393.8	1.8	449.1	2.0	521.8	2.4	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20x-45-0380-BF	18.5	38	26327	195.2	0.7	207.7	0.8	242.5	0.9	270.1	1.0	300.8	1.1	391.6	1.5	461.1	1.8	551.1	2.1	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20x-45-0440-BF	22	44	30484	209.5	0.7	219.6	0.7	260.2	0.9	281.7	0.9	303.5	1.0	415.1	1.4	466.7	1.5	526.3	1.7	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20x-45-0600-BF	30	60	41569	928.5	2.2	944.1	2.3	999.5	2.4	1034.7	2.5	1078.7	2.6	1214.5	2.9	1304.3	3.1	1439.7	3.5	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20x-46-0750-BF	37	75	51962	965.5	1.9	968.0	1.9	1044.5	2.0	1086.8	2.1	1136.2	2.2	1340.1	2.6	1457.3	2.8	1617.7	3.1	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20x-46-0900-BF	45	90	62354	1100.3	1.8	1126.0	1.8	1227.4	2.0	1352.4	2.2	1532.0	2.5	1608.3	2.6	1766.6	2.8	1998.3	3.2	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20x-47-1100-BF	55	110	76210	1057.8	1.4	1086.6	1.4	1193.5	1.6	1326.5	1.7	1508.0	2.0	1609.8	2.1	1776.2	2.3	2008.7	2.6	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20x-47-1500-BF	75	150	103923	1153.4	1.1	1202.7	1.2	1337.3	1.3	1557.9	1.5	1842.7	1.8	1915.5	1.8	2198.8	2.1	2568.5	2.5	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20x-48-1800-BF	90	180	124708	1141.3	0.9	1192.3	1.0	1331.6	1.1	1568.7	1.3	1890.3	1.5	1933.0	1.6	2236.5	1.8	2653.6	2.1	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20x-48-2200-BF	110	220	152420	1245.9	0.8	1312.9	0.9	1493.2	1.0	1823.5	1.2	2296.8	1.5	2289.6	1.5	2719.0	1.8	3338.5	2.2	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20x-48-2650-BF	132	265	183597	1453.3	0.8	1538.5	0.8	1743.3	0.9	2169.6	1.2	2795.7	1.5	2636.3	1.4	3182.5	1.7	3996.3	2.2	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20x-49-3200-BF	160	320	221703	1497.9	0.7	1588.4	0.7	1836.3	0.8	2215.4	1.0	2662.5	1.2	2921.5	1.3	3407.6	1.5	3986.5	1.8	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
20x-410-3600-BF	180	360	249415	1518.8	0.6	1610.4	0.6	1895.8	0.8	2110.8	0.8	2373.1	1.0	3054.3	1.2	3627.8	1.5	4445.2	1.8	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20

Table Abbreviations:

- P_r = Rated drive power (expressed in kiloWatts)
- $I_{r, out}$ = Rated drive output current (expressed in Amps)
- $S_{r, equ}$ = Rated apparent drive output power (expressed in Volt-Amperes)
- $P_{L, CDM (X,Y)}$ = absolute power losses, CDM associated, in operating condition (X, Y), where X = Motor stator frequency (%) and Y = Torque producing current (%), (expressed in Watts)
- $p_{L, CDM (X,Y)}$ = relative power losses, CDM associated, in operating condition (X, Y), where X = Motor stator frequency (%) and Y = Torque producing current (%), (expressed as a Percentage)
- $P_{L, control standby}$ = Power losses, control board associated, when CDM is in standby mode (expressed in Watts)

Notes:

- All calculations performed at nominal 400V, 50Hz supply, using the default switching frequency of the drive rating. See Product Manual DOC-0017-04 for values.
- Products do not have a Normal Duty rating.