

# COMMERCIAL PUMPS MOTORS EFFICIENCY TABLE | TECHNICAL DATA

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## Efficiency levels for motors for all series of Armstrong commercial pumps

HP	RPM	FRAME SIZE	ENERGY EFFICIENT (12.11)		NEMA PREMIUM (12.12)	
			ODP/TEFC	ODP	TEFC	ODP
0.33	1800	56c	68.0%	68.0%	Fractional power and frame 56 motors are not covered by energy policy acts and will be supplied with the (standard) efficiency supplied by the manufacturer.	
	1200		ON REQUEST			
0.5	1800	56c	74.0%	74.0%		
	1200		ON REQUEST			
0.75	1800	56c	75.5%	75.5%		
	1200	143	ON REQUEST			
1	1800	143	82.5%	82.5%	85.5%	85.5%
	1200	145	80.0%	80.0%	82.5%	82.5%
1.5	3600	143	82.5%	82.5%	84.0%	84.0%
	1800	145	84.0%	84.0%	86.5%	86.5%
	1200	182	84.0%	85.5%	86.5%	87.5%
2	3600	145	84.0%	84.0%	85.5%	85.5%
	1800	145	84.0%	84.0%	86.5%	86.5%
	1200	184	85.5%	86.5%	87.5%	88.5%
3	3600	145/ 182	84.0%	85.5%	85.5%	86.5%
	1800	182	86.5%	87.5%	89.5%	89.5%
	1200	213	86.5%	87.5%	88.5%	89.5%
5	3600	182/ 184	85.5%	87.5%	86.5%	88.5%
	1800	184	87.5%	87.5%	89.5%	89.5%
	1200	215	87.5%	87.5%	89.5%	89.5%
7.5	3600	184/213	87.5%	88.5%	88.5%	89.5%
	1800	213	88.5%	89.5%	91.0%	91.7%
	1200	254	88.5%	89.5%	90.2%	91.0%
10	3600	213/215	88.5%	89.5%	89.5%	90.2%
	1800	215	89.5%	89.5%	91.7%	91.7%
	1200	256	90.2%	89.5%	91.7%	91.0%
15	3600	215/254	89.5%	90.2%	90.2%	91.0%
	1800	254	91.0%	91.0%	93.0%	92.4%
	1200	284	90.2%	90.2%	91.7%	91.7%
20	3600	254/256	90.2%	90.2%	91.0%	91.0%
	1800	256	91.0%	91.0%	93.0%	93.0%
	1200	286	91.0%	90.2%	92.4%	91.7%
25	3600	256/284	91.0%	91.0%	91.7%	91.7%
	1800	284	91.7%	92.4%	93.6%	93.6%
	1200	324	91.7%	91.7%	93.0%	93.0%
30	3600	284/286	91.0%	91.0%	91.7%	91.7%
	1800	286	92.4%	92.4%	94.1%	93.6%
	1200	326			93.6%	93.0%
40	3600	386/324	91.7%	91.7%	92.4%	92.4%
	1800	324	93.0%	93.0%	94.1%	94.1%
	1200	364			94.1%	94.1%
50	3600	324/326	92.4%	92.4%	93.0%	93.0%
	1800	326	93.0%	93.0%	94.5%	94.5%
	1200	365			94.1%	94.1%
60	3600	326/364	93.0%		93.6%	93.6%
	1800	364			95.0%	95.0%
	1200	404			94.5%	94.5%
75	3600	364/365			93.6%	93.6%
	1800	365			95.0%	95.4%
	1200	405			94.5%	94.5%

2

HP	RPM	FRAME SIZE	ENERGY EFFICIENT (12.11)		NEMA PREMIUM (12.12)	
			ODP/TEFC	ODP	TEFC	ODP
100	3600	365/405			93.6%	94.1%
	1800	405/405			95.4%	95.4%
	1200	444			95.0%	95.0%
125	3600	405/444			94.1%	95.0%
	1800	405/444			95.4%	95.4%
	1200	445			95.0%	95.0%
150	3600	405/445			94.1%	95.0%
	1800	444/445			95.8%	95.8%
	1200	445			95.4%	95.8%
200	3600	444/447			95.0%	95.4%
	1800	445/447			95.8%	96.2%
	1200	449			95.4%	95.8%
250	1800	447/449			95.8%	96.2%
	1200	449			95.4%	95.8%
300	1800	449			95.8%	96.2%
	1200	500			95.4%	95.8%
350	1800	500			95.8%	96.2%
	1200	500			95.4%	95.8%
400	1800	447/500			95.8%	96.2%
	1200	500			95.8%	95.8%
450	1800	500			96.2%	96.2%
	1200	500			96.2%	95.8%
500	1800	500			96.2%	96.2%
	1200	500			96.2%	95.8%

NOTE:

- 1 Energy efficient (NEMA table 12.11) motors are available only for close-coupled JM/JP applications
- 2 All other pumping units (4030, 4300, 4302, 4312, 4600, 4700) must be supplied with NEMA premium (NEMA table 12.12) efficiency levels
- 3 Efficiencies shown above are nominal or nameplate efficiency levels and are based on Armstrong's choice of motor

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