AGGREGATE MOTORS

BALDOR • RELIANCE

AGGREGATE MOTORS

THE RIGHT PRODUCT IN THE TOUGHEST CONDITIONS

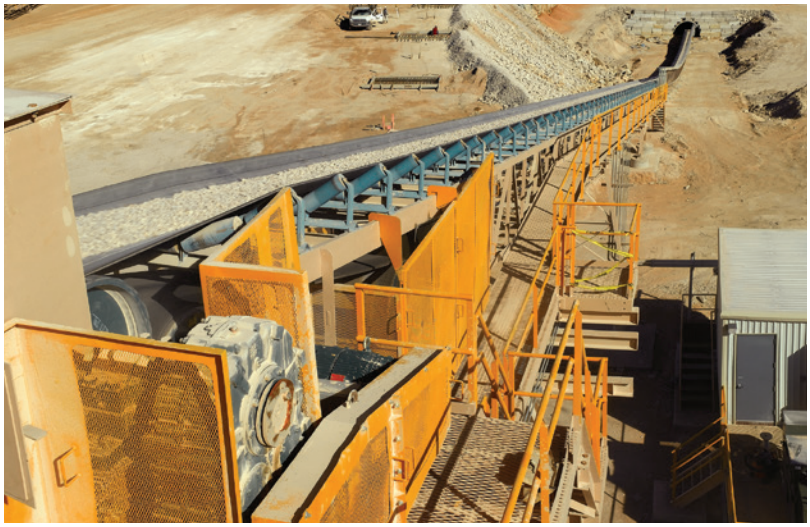
For decades, aggregate operators have come to depend on Baldor products to keep their facilities operating at optimum efficiency to remain competitive and profitable. Building on the rich history of our mechanical power transmission products, you can expect the same level of quality, trust and reliability with Baldor•Reliance® motor solutions. We understand the loads v-belt drives put on bearings as well as conveyors starting under load and the need to power through. We also understand surges in the system happen all while performing in some of the harshest environmental conditions.

Reliability *– Rugged, durable motor construction protects rotating and electrical components to provide extended operating life in industrial applications prone to dusty, dirty, wet outdoor and potentially high vibration environments.*

Performance *– In this industry it is all about having enough torque available when you need it to maximize production. Selecting the right motor is key to providing the needed starting torque, peak torque and the ability to handle overloads.*

Flexibility *– Ball and roller bearing designs for coupled and belted applications provide flexibility to fit any application. Large rotatable conduit boxes offer easy connection points in F1/F2, horizontal and vertical installations. Suitable for use on Sine wave and inverter power for fixed and adjustable speed operation.*

Lower Operating Cost *– Highest energy efficient designs reduce operating costs (since 97.3 % of typical motor life cycle costs are from energy consumption). Baldor•Reliance premium efficient Super E® motor's meet and exceed all energy efficiency requirements for US, Canada and Mexico regulations.*



SEVERE DUTY

ECP Motors

Severe Duty Motors – Suited for normal torque applications in harsh industrial environments where reliability and highest operating efficiency is desired. Built with heavy duty cast iron construction and rated for IP55 enclosure protection. Premium efficiency electrical designs provide 1.15 service factor and are suitable for use on inverter power.

Target Applications:

- Water delivery systems
- Normal & light conveying
- Pumping & drainage

Baldor•Reliance® severe duty motors are available from stock from 1 thru 800 HP. For complete list of ratings, please see the CA501 catalog or baldor.com.

Severe duty motors can be mounted in a variety of configurations to suit the applications.

Dirt, dust and water are common environmental conditions in the aggregate industry.

CRUSHER DUTY

ECR Motors

Baldor•Reliance® high torque Crusher Duty motors available from 5 thru 500 HP.

Crusher Duty Motors – Meeting the demands of the aggregate industry these motors are NEMA Design A with starting and peak torques that exceed NEMA Design C. They also have a 1.25 service factor up to 100 HP and 1.15 sf above 100HP for reliable performance in overload conditions. Robust IP55 enclosure designs use oversized ball and roller bearings well suited for belted and coupled applications. While 5010Z and 5012Z frames come with an industry preferred oversized 4.375" shaft diameter.

Target Applications:

- Belted Conveying: feeders, stacker & overland
- Screen Decks
- Augers & Screw Conveyors
- Log Washers
- Crushers

Available adaptor rails provide the flexibility to match existing unique mounting footprints from 449T to 586/7, 449T to 505US and 449T to 504/5U.

▲ *Screen decks are prone to surges and loaded starts.*

◀ *Crushers are subject to jams and overloads requiring extra torque to clear.*

▶ *Loaded starts & heavy loads are common in overland conveying.*

HIGH TORQUE MOTORS FOR SEVERE APPLICATIONS

HP	RPM	NEMA	CATALOG NUMBER	BEARING TYPE	LIST PRICE	MULT. SYM.	S.F.	CT (HZ)	VT (HZ)	FULL LOAD AMPS @ HI VOLTS	FULL LOAD EFF. % (NOM.)	FULL LOAD TORQUE (LB-FT)	LRT %	BDT %
5	1800	184T	ECR9054T	Oversized Ball Bearing	808	ST	1.25	6-60	6-60	7.1	89.5	15	227%	376%
	1200	215T	ECR9056T	Oversized Ball Bearing	1,395	ST	1.25	6-60	6-60	7.5	89.5	22.7	267%	363%
7.5	1800	213T	ECR9074T	Oversized Ball Bearing	1,139	ST	1.25	6-60	6-60	9.3	91.7	22.1	219%	350%
	1200	254T	ECR9076T	Oversized Ball Bearing	2,160	ST	1.25	6-60	6-60	10.3	91	33.8	243%	296%
10	1800	215T	ECR9104T	Oversized Ball Bearing	1,396	ST	1.25	6-60	6-60	12.3	91.7	29.7	236%	347%
	1200	256T	ECR9106T	Oversized Ball Bearing	2,509	ST	1.25	6-60	6-60	14	91	45	284%	367%
15	1800	254T	ECR9154T	Oversized Ball Bearing	1,933	ST	1.25	6-60	6-60	18.6	92.4	44.7	266%	324%
	1200	284T	ECR9156T	Oversized Ball Bearing	3,443	ST	1.25	6-60	6-60	19.4	91.7	67.2	301%	268%
20	1800	256T	ECR9204T	Oversized Ball Bearing	2,303	ST	1.25	6-60	6-60	24	93	59.7	255%	290%
	1200	286T	ECR9206T	Oversized Ball Bearing	4,145	ST	1.25	6-60	6-60	29	91.7	88.3	237%	314%
25	1800	284T	ECR9254T	Oversized Ball Bearing	2,870	ST	1.25	6-60	6-60	31	93.6	73.8	253%	282%
	1200	324T	ECR9256T	Oversized Ball Bearing	4,956	ST	1.25	6-60	6-60	34	93	110	219%	330%
30	1800	286T	ECR9304T	Oversized Ball Bearing	3,375	ST	1.25	6-60	6-60	37	93.6	89.2	261%	266%
	1200	326T	ECR9306T	Oversized Ball Bearing	5,522	ST	1.25	6-60	6-60	42	93	133	231%	364%
40	1800	324T	ECR9404T	Oversized Ball Bearing	4,371	ST	1.25	6-60	6-60	49	94.1	118	253%	270%
	1200	364T	ECR9406TR	Roller Bearing	7,620	ST	1.25	6-60	6-60	49	94.1	177	267%	252%
50	1800	326T	ECR9504T	Oversized Ball Bearing	5,335	ST	1.25	6-60	6-60	61	94.5	147	274%	276%
	1200	365T	ECR9506TR	Roller Bearing	8,911	ST	1.25	6-60	6-60	62	94.1	222	269%	249%
	900	404T	ECR9508TR	Roller Bearing	11,302	ST	1.25	6-60	6-60	79.4	92.4	297	274%	265%
60	1800	364T	ECR9604T	Ball Bearing	7,504	ST	1.25	6-60	6-60	70	95	177	285%	281%
		364T	ECR9604TR	Roller Bearing	7,504	ST	1.25	6-60	6-60	70	95	177	285%	281%
	1200	404T	ECR9606TR	Roller Bearing	10,992	ST	1.25	6-60	6-60	71	94.5	266	266%	277%
	900	405T	ECR9608TR	Roller Bearing	12,780	ST	1.25	10-60	6-60	93.2	92.4	355	286%	275%
75	1800	365T	ECR9754T	Ball Bearing	9,107	ST	1.25	10-60	6-60	88	95.4	221	279%	274%
		365T	ECR9754TR	Roller Bearing	9,107	ST	1.25	10-60	6-60	88	95.4	221	279%	274%
	1200	405T	ECR9756TR-4	Roller Bearing	12,615	ST	1.25	6-60	6-60	91	94.5	332	276%	287%
	900	444T	ECR9758TR-4	Roller Bearing	18,677	ST	1.25	6-60	6-60	98.8	93.6	443	241%	251%
100	1800	405T	ECR91004T-4	Ball Bearing	12,229	ST	1.25	6-60	6-60	115	95.4	295	248%	297%
		405T	ECR91004TR-4	Roller Bearing	12,229	ST	1.25	6-60	6-60	115	95.4	295	248%	297%
	1200	444T	ECR91006TR-4	Roller Bearing	16,353	ST	1.15	6-60	6-60	119	95	442	226%	273%
	900	445T	ECR91008TR-4	Roller Bearing	21,773	ST	1.25	15-60	6-60	133.0	93.6	591	250%	251%
125	1800	444T	ECR91254T-4	Ball Bearing	15,429	ST	1.15	6-60	6-60	149	95.4	368	235%	286%
		444T	ECR91254TR-4	Roller Bearing	15,429	ST	1.15	6-60	6-60	149	95.4	368	235%	286%
	1200	445T	ECR91256TR-4	Roller Bearing	18,794	ST	1.15	6-60	6-60	153	95.4	551	268%	265%
	900	447T	ECR91258TR-4	Roller Bearing	27,440	ST	1.15	30-60	6-60	171	94.1	738	254%	272%

Catalog numbers ending in -4 are rated for 460 Volts only, all other catalog numbers are rated for 230/460 Volts.
Frames ending in Z have oversized 4.375 inch shaft diameter.

Typical Conveyor applications | Typical Decks, Washers, other high torque applications | Typical Crusher applications

CRUSHER DUTY

ECR Motors

HIGH TORQUE MOTORS FOR SEVERE APPLICATIONS

HP	RPM	NEMA	CATALOG NUMBER	BEARING TYPE	LIST PRICE	MULT. SYM.	S.F.	CT (HZ)	VT (HZ)	FULL LOAD AMPS @ HI VOLTS	FULL LOAD EFF. % (NOM.)	FULL LOAD TORQUE (LB-FT)	LRT %	BDT %
150	1800	445T	ECR91504T-4	Ball Bearing	18,224	ST	1.15	10-60	6-60	168	95.8	441	230%	261%
		445T	ECR91504TR-4	Roller Bearing	18,224	ST	1.15	10-60	6-60	168	95.8	441	230%	261%
	1200	447T	ECR91506TR-4	Roller Bearing	21,592	ST	1.15	10-60	6-60	177	95.8	661	265%	258%
	900	449T	ECR91508TR-4	Roller Bearing	30,594	ST	1.15	30-60	6-60	196	94.5	885	270%	283%
200	1800	447T	ECR92004T-4	Ball Bearing	22,072	ST	1.15	15-60	6-60	225	96.2	588	239%	251%
		447T	ECR92004TR-4	Roller Bearing	22,072	ST	1.15	15-60	6-60	225	96.2	588	239%	251%
	1200	449T	ECR92006TR-4	Roller Bearing	26,293	ST	1.15	15-60	6-60	232	95.8	883	250%	290%
	900	L449T	ECR92008TR-4	Roller Bearing	35,571	ST	1.15	30-60	6-60	277	94.5	1179	273%	282%
250	1800	449T	ECR92504T-4	Ball Bearing	22,387	ST	1.15	15-60	6-60	278	96.2	736	243%	240%
		449T	ECR92504TR-4	Roller Bearing	22,387	ST	1.15	15-60	6-60	278	96.2	736	243%	240%
	1200	449T	ECR92506TR-4	Roller Bearing	30,113	ST	1.15	30-60	6-60	283	95.8	1105	247%	278%
		5010Z	ECR950256TR-4	Roller Bearing	50,556	ST	1.15	30-60	6-60	289	95.8	1099	217%	264%
	900	L449T	ECR92508TR-4	Roller Bearing	47,532	ST	1.15	30-60	6-60	359	95.0	1474	265%	268%
		5010Z	ECR950258TR-4	Roller Bearing	57,220	ST	1.15	30-60	6-60	321	95.1	1465	209%	247%
300	1800	449T	ECR93004T-4	Ball Bearing	31,370	ST	1.15	30-60	6-60	336	96.2	882	270%	256%
		449T	ECR93004TR-4	Roller Bearing	31,370	ST	1.15	30-60	6-60	336	96.2	882	270%	256%
		5010Z	ECR950304TR-4	Roller Bearing	50,872	ST	1.15	30-60	6-60	348	96.3	878	230%	312%
	1200	L449T	ECR93006TR-4	Roller Bearing	39,347	ST	1.15	30-60	6-60	381	95.8	1321	305%	277%
		5010Z	ECR950306TR-4	Roller Bearing	52,120	ST	1.15	30-60	6-60	348	95.8	1318	225%	261%
	900	5012Z	ECR950308TR-4	Roller Bearing	61,526	ST	1.15	30-60	6-60	386	94.9	1759	210%	242%
350	1800	449T	ECR93504T-4	Ball Bearing	34,740	ST	1.15	30-60	6-60	390	96.2	1030	266%	243%
		449T	ECR93504TR-4	Roller Bearing	34,740	ST	1.15	30-60	6-60	390	96.2	1030	266%	243%
		5010Z	ECR950354TR-4	Roller Bearing	52,445	ST	1.15	30-60	6-60	404	96.2	1025	236%	296%
	1200	L449T	ECR93506TR-4	Roller Bearing	43,718	ST	1.15	30-60	6-60	433	95.8	1545	280%	252%
		5012Z	ECR950356TR-4	Roller Bearing	56,043	ST	1.15	30-60	6-60	406	95.8	1538	224%	269%
	900	5012Z	ECR950358TR-4	Roller Bearing	63,429	ST	1.15	30-60	6-60	456	94.9	2053	233%	254%
400	1800	L449T	ECR94004T-4	Ball Bearing	40,396	ST	1.15	30-60	6-60	442	96.2	1177	276%	242%
		L449T	ECR94004TR-4	Roller Bearing	40,396	ST	1.15	30-60	6-60	442	96.2	1177	276%	242%
		5010Z	ECR950404TR-4	Roller Bearing	54,067	ST	1.15	30-60	6-60	459	96.2	1171	207%	277%
	1200	5012Z	CR950406TR-4	Roller Bearing	59,934	ST	1.15	30-60	6-60	463	95.5	1759	218%	250%
	900	5012Z	ECR950408TR-4	Roller Bearing	66,888	ST	1.15	30-60	6-60	521	94.9	2345	223%	241%
450	1800	5012Z	ECR950454TR-4	Roller Bearing	58,137	ST	1.15	30-60	6-60	512	96.3	1319	202%	257%
	1200	5012Z	ECR950456TR-4	Roller Bearing	62,293	ST	1.15	30-60	6-60	523	95.8	1978	241%	268%
	900	5012Z	ECR950458TR-4	Roller Bearing	87,790	ST	1.15	30-60	6-60	612	95.1	2640	233%	250%
500	1800	5010Z	ECR950504TR-4	Roller Bearing	59,067	ST	1.15	30-60	6-60	576	96.3	1465	223%	263%
	1200	5012Z	ECR950506TR-4	Roller Bearing	65,755	ST	1.15	30-60	6-60	575	95.9	2199	217%	242%

Catalog numbers ending in -4 are rated for 460 Volts only, all other catalog numbers are rated for 230/460 Volts.
Frames ending in Z have oversized 4.375 inch shaft diameter.

Typical Crusher applications

QUARRY DUTY/ CUSTOM CAPABILITIES

Quarry Duty Motors – Low horsepower solutions for specialty high torque and overload applications in industrial environments where lighter motor weight, reliability and highest operating output are desired. Motors have heavy gage steel frame construction rated for IP55 enclosure protection for long life in applications exposed to the elements. Premium efficiency electrical designs minimize operating costs while providing NEMA Design C torques and a 1.15 service factor. Motors are suitable for fixed speed and variable speed operation for a wide range of operational output.

Quarry Duty motors are available in catalog ratings from 2 HP to 10 HP. For complete list of ratings, please see the CA501 catalog or baldor.com.

Custom Capabilities – The most complete product offering for global aggregate and mining industry with custom motor designs for unique OEM requirements. Offering a complete solution including DC motors, air or water cooled, medium voltage, permanent magnet designs and submersibles all with extensive product families.

MISSION

Our mission is to be the best (as determined by our customers) marketers, designers and manufacturers of industrial electric motors, drives and mechanical power transmission products

Taking care of our customers safely

BALDOR
A MEMBER OF THE ABB GROUP

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