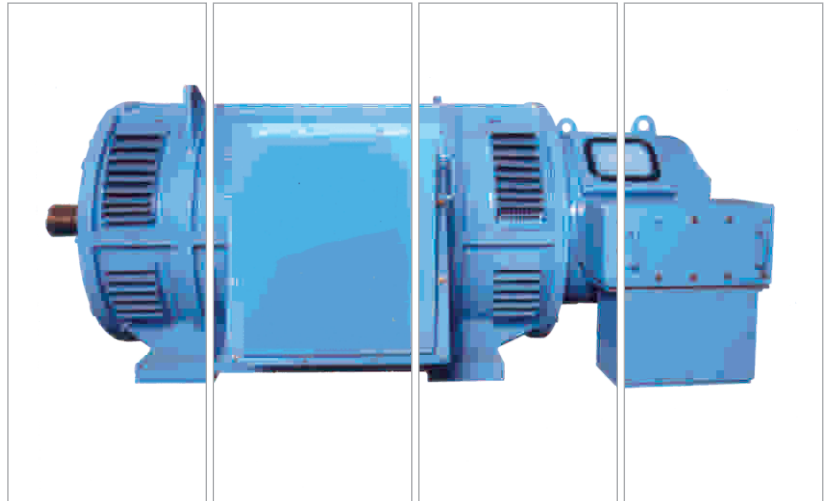


# AC Mill Duty Motors & Switchgear



- STEEL MILLS
- RE-ROLLING MILLS
- SUGAR MILLS
- CEMENT MILLS
- PAPER MILLS

## Mill Duty Motors

Mfrd. by : Kirloskar Electric Co Ltd.



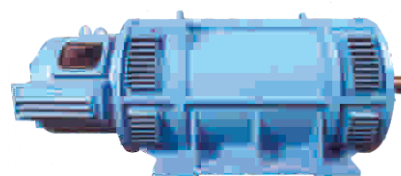
### SALIENT FEATURES :

- Type : Foot mounted Slipping, Heavy Duty, Induction Motors
- Enclosure : Screen Protected, Drip Proof.
- Frames : TR6, TR7 ; KCW450, KCW500 & KCW560
- Voltages : 415V; 440V; 3,300 V; 6,600 V ; 11,000 V (50 / 60 Htz)
- Functional, Rugged, Heavy duty, Compact & maintenance friendly.
- Shock resistant construction in cast Iron & Steel fabricated body
- Rotor is specially designed with tight-bar-in-slot construction with taper section to obtain adequate starting torque & critical load factors.
- Stators & Rotors are flood impregnated with polyester resin varnish to ensure longevity of protection against chemicals and moisture.
- A high carbon, hard steel shaft with a large cross section provides, strength with minimum deflection & vibration.
- Heavy duty Bearings, Brushgear & Slippings ensure high efficiency even under severe operation conditions.
- Design ensures efficient ventilation & heat transfer from windings & cores. Can offer IP23/IC01 ; IPW 44 / IC01 ; IP55 / IC61 ; IP55 / IC66 ; IP55 / IC81
- Terminations are provided in a large box to ensure full electrical clearances & insulations
- Typical Applications : Rolling Mills, Sugar Cane Crushers, Cement Mills, Steel Mills, Sugar Mills etc.
- Use low-loss magnetic core stamping & high conductivity copper conductors (solid & wire) for windings, with Class B/F insulation.
- With a design that has proved itself over 3500+ machines that have been deployed in the last 50+ years clearly this is the choice for all suitable applications.
- Designed in compliance with Global Standards & practices.

SELECTION CHART			
KW	HP	RPM	FRAME
187	250	720	TR6
225	300	720	TR6
300	400	720	TR6
335	450	720	TR7
400	500	720	KCW 450
450	600	720	KCW 450
475	650	720	KCW 500
600	800	720	KCW 500
750	1000	720	KCW 500
930	1250	720	KCW 560
1125	1500	720	KCW 560

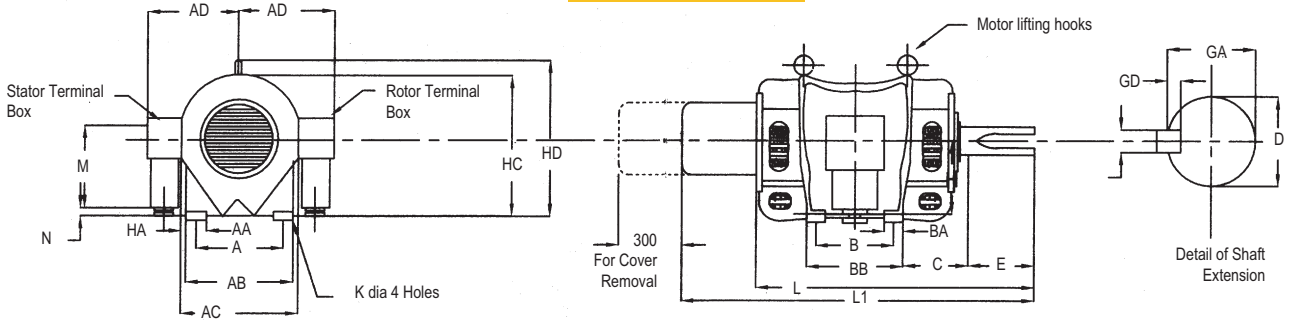
### KIRLOSKAR Motors complies with the following standards

Standard	Performance & Temperature	Insulation	Method of Cooling	Protection by motor enclosure	Mounting & Shaft extension Foot mounted motors	Type of Construction & Mounting	Terminal Markings	Vibration level & measurement	Testing	Rating plate Marking
IEC	34-1	85	34-6	34-5	72A	34-7	34-8 HD 347	CENELEC	34-2	34-1
BS	4999-30,31 4999-32	4999-23	4999-21	4999-20	4999-10	4999-22	4999-3	4999-50	4999-60	4999-4
IS	325	1271	6362	4691	8223	-	4728	4729	4029	325



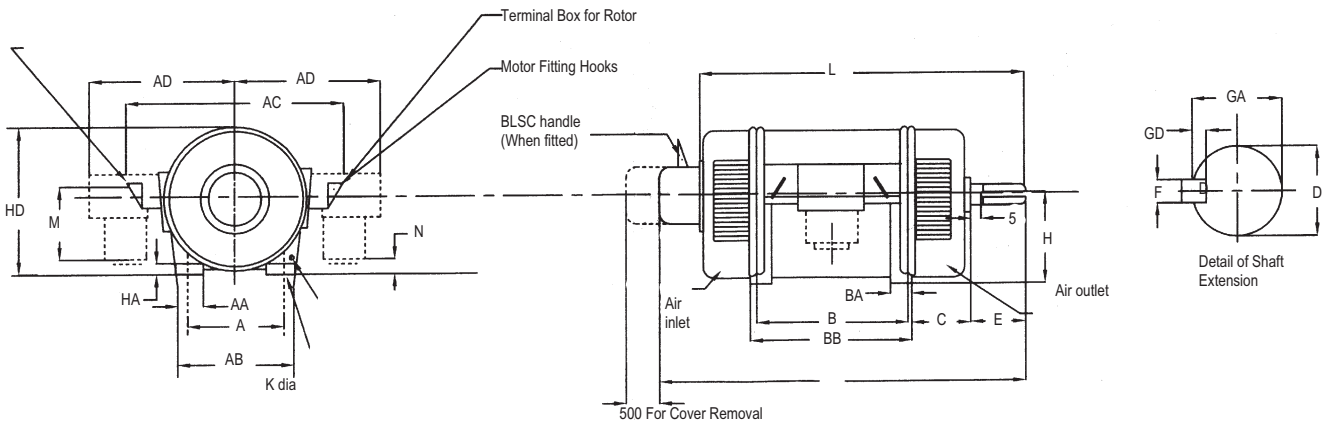
Mill Duty Motors - Dimension Drawings

TR SERIES



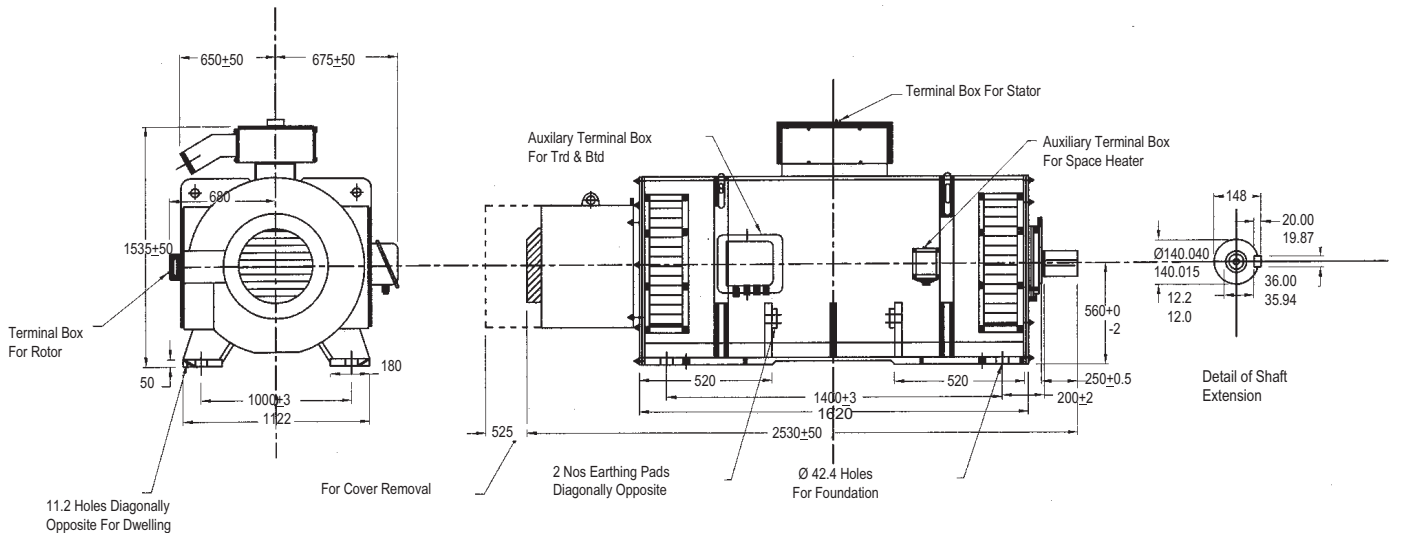
TR	A	B	C	D	E	F	H	M	N	L	L1	K	AA	AB	AC	AD	BA	BB	GD	HA	HC	HD	GA
6	760	648	255	110	210	32	475	415	86	1357	1702	28	140	900	914	755	133	736	18.16	56	932	1065	116.58
7	864	675	243	110	210	32	527	415	149	1357	1706	28	152	1016	1076	810	152	775	18.16	56	1035	1166	116.58

KCW - SERIES



KCW	A	B	C	D	E	F	GA	GD	GH	K	AA	AB	AC	AD	BA	BB	HA	HD	L	M	N
450	750	1000	315	110M6	210	28	116	16	450	35	150	900	1292	790	150	1100	60	950	2240	415	90
500	850	800	475	120M6	210	32	100	18	500	42	150	990	1400	800	260	1040	60	1005	2641	415	102

KCW - 560



\*All dimension in mm. Subject to continuous development. Only for reference



## MILL DUTY SWITCH GEARS

**Power<sup>+</sup>M** : Liquid Rotor Starters for Slipping Motors.  
Mfrd by : NIE Power & Engineering Pvt. Ltd.

### SALIENT FEATURES :

- Designed for smooth step-less operation.
- Entire unit is fabricated with prime steel welded design.
- Inner FRP lining ensures corrosion free longevity & operational ruggedness
- Specially profiled steel electrodes ensure equal resistance in every phase
- Polypropylene phase barriers ensure high insulation & stability.
- Tank design provides for large volume of electrolyte for efficient heat dissipation to ensure less temperature rise.
- Heavy duty contractor ensures to short-circuit resistance when motor attains full speed.
- Low investment, low maintenance coupled with simple operation marks these units a very reliable partner.
- Can provide on request : Motorised version; Liquid level control with alarm contacts; Temperature indicator & controller.



**Power<sup>+</sup>V** : Air Insulated Indoor Vacuum Switchgear (upto 11KV)  
Mfrd by : NIE Power & Engineering Pvt. Ltd.

### SALIENT FEATURES

- Metal clad construction – all segregated compartments
- IP4x degree of protection externally & IP2X between compartments
- Independent exhaust vents for all HT compartments
- Modular Construction for expansions with bolted structure
- Type Tested for BIL & short circuit as per IEC 62271/200/2003
- Lipped-edge construction for additional strength
- Foundation frame as standard supply

### BREAKERS COMPARTMENT

- Racking in/out of breaker from "test" to "service" vice versa with cubicle door closed
- Mechanical inter lock to prevent racking in/out of breaker in closed Position
- Live parts covered by automatic metallic shutters when breaker is racked out
- Multiple guides for safe and sure engagement of fixed and moving contacts

### METERING COMPARTMENT

- Metering compartment with numerical/static/electromagnetic relays
- Adequate space for ease of control and indication

### BUS BAR COMPARTMENT

- Spacious bus bar compartment for adequate air clearances
- Option for busbar insulation available
- Option for both Copper or Aluminium Busbar

