

MULTITECH SYSTEMS

Plot No. 48-49, Gali No.6, Krishna Colony, Opp. Sector-25, Faridabad-121004, Haryana Mob.: 9911417747, 9560063747, 9910705767, 9911723747, 9910043747, 9911283747 E-mail : <u>mtscranes@gmail.com | sales@multitechsystems.in</u> <u>www. multitechsytem.net</u>











Multitech Systems

Compact Shrouded Conductor System MTS - 1



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Compact Shrouded Conductor System





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Compact Shrouded Conductor System MTS - 2

Multitech



CURRENT COLLECTORS

Heavy Duty Current Collectors are of fully Articulated Design. This provides multi axis degree of movement thereby allowing compensation of machine motion tolerances and installation variation.

Spring Loaded unit provides positive pressure contact with conductors, thus ensures uninterrupted power transfer during motion.

Variety of designs for different applications and site conditions.

MULTITECH	
SYSTEMS	
Single Pole Current	
Collector Technical	
Data	



MULTITECH SYSTEMS Single Pole Current Collector Technical Data			
Туре	MACC 60	MACC 125	MACC 250
Current Rating	60A	125A	250A
Collector movement Horizontal Vertical	±125 ±50	±200 ±60	±200 ±60
Mounting Bracket	16 sqmm bar	25 sqmm bar	25 sqmm bar
Mounting Distance From conductor contact surface	100mm	127mm	127mm
Sintered Copper Shoe	125A	125A	250A
Shoe Holder	Nylon	Nylon	ABS
Structure	Metallic	Metallic	Metallic

INSTALLATION MULTITECH SYSTEMS can be installed in most atmospheres such as dusty, humid chemical / acidic etc MAINTENANCE COST No periodic maintenance is required. Only consumable item is contact shoe.



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Electro-Hydraulic Thruster (18 kg) Type : ST 520

INTRODUCTION

Electro-hydraulic thruster is a device which develops linear (or force) required to operate the required mechanism. The input to the device is three phase supply. The thrusters are widely used in material handling machines. Thruster in various models develop 18kg to 114kg . In stroke lengths of 51 mm, 76mm 127mm

Thrusters should be mounted with in ± 10° From vertical. Working fluid - Transformer oil to BS 148.

Technical Data

Thruster Model	ST - 520
Lifting Force	18 Kg
Stroke	51 mm
Current	0.4 amps
Power	90 Watt
Oil Capacity	2 Litters Transformer Oil
Weight	12 Kg
Voltage A. C.	415V 3Ø,AC
Ingress Protection	IP 55 (IS/IEC 600529 : 2001)
Ambient Temperature	50°C Max

* 380V, 460V, 550V on Enguiry





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Electro-hydraulic Thrusters

ST 520

Multitech Systems

Electro-Hydraulic Thruster (34 kg) Type : ST 535

INTRODUCTION

Electro-hydraulic thruster is a device which develops linear (or force) required to operate the required mechanism. The input to the device is three phase supply. The thrusters are widely used in material handling machines. Thruster in various models develop 18kg to 114kg . In stroke lengths of 51 mm, 76mm 127mm

Thrusters should be mounted with in ± 10° From vertical. Working fluid - Transformer oil to BS 148.

Technical Data

Thruster Model	ST - 535
Lifting Force	34 Kg
Stroke	51 mm
Current	0.55 amps
Power	150 Watt
Oil Capacity	2.5 Litters Trar
Weight	16 Kg
Voltage A. C.	415V 3Ø,AC
Ingress Protection	IP 55 (IS/IEC 6
Ambient Temperature	50°C Max

* 380V, 460V, 550V on Enguiry





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Electro-hydraulic Thrusters ST 535

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Electro-Hydraulic Thruster (46 kg) Type : ST 545

INTRODUCTION

Electro-hydraulic thruster is a device which develops linear (or force) required to operate the required mechanism. The input to the device is three phase supply. The thrusters are widely used in material handling machines. Thruster in various models develop 18kg to 114kg . In stroke lengths of 51 mm, 76mm 127mm

Thrusters should be mounted with in ± 10° From vertical. Working fluid - Transformer oil to BS 148.

Technical Data

Thruster Model	ST - 545
Lifting Force	46 Kg
Stroke	51 mm
Current	0.6 amps
Power	180 Watt
Oil Capacity	2.5 Litters Transformer Oil
Weight	18 Kg
Voltage A. C.	415V 3Ø,AC
Ingress Protection	IP 55 (IS/IEC 600529 : 2001)
Ambient Temperature	50°C Max

* 380V, 460V, 550V on Enguiry





Electro-hydraulic Thrusters ST 545

CYL FILLER PLUG **TYPE ST-546/ST53** ON TYPE ST-535 & ST-546 FERMINAL BOX IS FITTED IN ST 545

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Electro-Hydraulic Thruster (68 kg) Type : ST 870

INTRODUCTION

Electro-hydraulic thruster is a device which develops linear (or force) required to operate the required mechanism. The input to the device is three phase supply. The thrusters are widely used in material handling machines. Thruster in various models develop 18kg to 114kg . In stroke lengths of 51 mm, 76mm 127mm

Thrusters should be mounted with in ± 10° From vertical. Working fluid - Transformer oil to BS 148.

Technical Data

Thruster Model	ST - 870
Lifting Force	68 Kg
Stroke	76 mm
Current	0.7 amps
Power	200 Watt
Oil Capacity	4.5 Litters Tran
Weight	30 Kg
Voltage A. C.	415V 3Ø,AC
Ingress Protection	IP 55 (IS/IEC 6
Ambient Temperature	50°C Max

* 380V, 460V, 550V on Enquiry



Sectional View



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Electro-hydraulic Thrusters ST 870





Electro-Hydraulic Thruster (114 kg) Type : ST 8110

INTRODUCTION

Electro-hydraulic thruster is a device which develops linear (or force) required to operate the required mechanism. The input to the device is three phase supply. The thrusters are widely used in material handling machines. Thruster in various models develop 18kg to 114kg . In stroke lengths of 51 mm, 76mm 127mm

Thrusters should be mounted with in ± 10° From vertical. Working fluid - Transformer oil to BS 148.

Technical Data

Thruster Model	ST - 8110
Lifting Force	114 Kg
Stroke	76 mm
Current	0.8 amps
Power	250 Watt
Oil Capacity	4.5 Litters Transformer Oil
Weight	35 Kg
Voltage A. C.	415V 3Ø,AC
Ingress Protection	IP 55 (IS/IEC 600529 : 2001)
Ambient Temperature	50°C Max

* 380V, 460V, 550V on Enquiry





Electro-hydraulic Thrusters ST8110

ST 8110

CYL FILLER PLUG TYPE ST-546/ST53

DIL FILLER PLUG YP ST-870/ 13200 E ST-535 & ST-546

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MDT 100-18 Mill Duty Thruster Brakes

INTRODUCTION

Thruster Brake is device to retard the speed of moving machinery and to stop it accurately to the desired position. The breaking force is applied to the brake shoes by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed, and finally stopping it.

Technical Data

Item	Brake	Th
Model	MDT - 100-18	ST-520
Drum Dia	100 mm	-
Brake Shoe	Asbestos free/BA	-
Braking Torque	6 Kg-m	-
Thrust	-	18Kg
Stroke	-	51mm
Oil + Capacity	-	Transform
Rated Voltage	-	415V±10
Current At 415 V AC	-	0.4 Amps
Insulation	-	F Class
Ingress Protection	-	IP-44 IS/I
Surface Temperature		+50°C
Weight	9 kg	12 kg
Painting	Colour RAL 7021	





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Selection of Brake Size

Electo-hydraulic thruster is a device which develops liner thrust (or force) required to operate the required mechanism. The input to the device is three phase supply.

The brake torque must be => than motor full load as referred with drum. Formula as below:

- T = Torque in Kgm = $716 \times Hp$
- T = Torque in Nm = $\frac{9552 \text{ x Kw}}{rom}$

Where Hp/Kw = motor output & rpm = Rev/minute

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ST-520

MDT 150-18 Mill Duty Thruster Brakes

INTRODUCTION

Thruster Brake is device to retard the speed of moving machinery and to stop it accurately to the desired position. The breaking force is applied to the brake shoes by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed, and finally stopping it.

Technical Data

Item	Brake	Thruster
Model	MDT - 150-18	ST-520
Drum Dia	150 mm	-
Brake Shoe	Asbestos free/BA	-
Braking Torque	7.5 Kg-m	-
Thrust	-	18Kg
Stroke	-	51mm
Oil + Capacity	-	Transformer Oil 2 Litrs
Rated Voltage	-	415V±10%,3Ph AC,50Hz
Current At 415 V AC	-	0.4 Amps
Insulation	-	F Class
Ingress Protection	-	IP-44 IS/IEC 60529 (2001)
Surface Temperature		+50°C
Weight	11 kg	12 kg
Painting	Colour RAL 7021	



Selection of Brake Size

Electo-hydraulic thruster is a device which develops liner thrust (or force) required to operate the required mechanism. The input to the device is three phase supply.

The brake torque must be => than motor full load
as referred with drum. Formula as below:

Where Hp/Kw = motor output & rpm = Rev/minute

Multitech Systems MDT 160-18 Mill Duty Thruster Brakes

INTRODUCTION

Thruster Brake is device to retard the speed of moving machinery and to stop it accurately to the desired position. The breaking force is applied to the brake shoes by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed, and finally stopping it.

Technical Data

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item	Бгаке	Inr
Model	MDT - 160-18	ST-520
Drum Dia	160 mm	-
Brake Shoe	Asbestos free/BA	-
Braking Torque	9 Kg-m	-
Thrust	-	18Kg
Stroke	-	51mm
Oil + Capacity	-	Transforn
Rated Voltage	-	415V±109
Current At 415 V AC	-	0.4 Amps
Insulation	-	F Class
Ingress Protection	-	IP-44 IS/I
Surface Temperature		+50°C
Weight	11 kg	12 kg
Painting	Colour RAL 7021	









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Selection of Brake Size

Electo-hydraulic thruster is a device which develops liner thrust (or force) required to operate the required mechanism. The input to the device is three phase supply.

The brake torque must be => than motor full load as referred with drum. Formula as below:

- T = Torque in Kgm = $716 \times Hp$
- T = Torque in Nm = $\frac{9552 \text{ x Kw}}{rpm}$

Where Hp/Kw = motor output & rpm = Rev/minute

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MDT 200-18 Mill Duty Thruster Brakes

INTRODUCTION

Thruster Brake is device to retard the speed of moving machinery and to stop it accurately to the desired position. The breaking force is applied to the brake shoes by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed, and finally stopping it.

Technical Data

ltem	Brake	Thruster
Model	MDT - 200-18	ST-520
Drum Dia	200 mm	-
Brake Shoe	Asbestos free/BA	-
Braking Torque	20 Kg-m	-
Thrust	-	18Kg
Stroke	-	51mm
Oil + Capacity	-	Transformer Oil 2 Litrs
Rated Voltage	-	415V±10%,3Ph AC,50Hz
Current At 415 V AC	-	0.4 Amps
Insulation	-	F Class
Ingress Protection	-	IP-44 IS/IEC 60529 (2001)
Surface Temperature		+50°C
Weight	18 kg	12 kg
Painting	Colour RAL 7021	



Selection of Brake Size

Electo-hydraulic thruster is a device which develops liner thrust (or force) required to operate the required mechanism. The input to the device is three phase supply.

The brake torque must be => than motor full load
as referred with drum. Formula as below:

Where Hp/Kw = motor output & rpm = Rev/minute



INTRODUCTION

Thruster Brake is device to retard the speed of moving machinery and to stop it accurately to the desired position. The breaking force is applied to the brake shoes by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed, and finally stopping it.

Technical Data

ltem	Brake	Thr
Model	MDT - 200-34	ST-535
Drum Dia	200 mm	-
Brake Shoe	Asbestos free/BA	-
Braking Torque	32 Kg-m	-
Thrust	-	34Kg
Stroke	-	51mm
Oil + Capacity	-	Transforn
Rated Voltage	-	415V±109
Current At 415 V AC	-	0.5 Amps
Insulation	-	F Class
Ingress Protection	-	IP-44 IS/IE
Surface Temperature		+50°C
Weight	24 kg	16 kg
Painting	Colour RAL 7021	





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MDT-200-18

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ST-520





Selection of Brake Size

Electo-hydraulic thruster is a device which develops liner thrust (or force) required to operate the required mechanism. The input to the device is three phase supply.

The brake torque must be => than motor full load as referred with drum. Formula as below:

- T = Torque in Kgm = $716 \times Hp$
- T = Torque in Nm = $9552 \times Kw$

Where Hp/Kw = motor output & rpm = Rev/minute

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MDT 250-18 Mill Duty Thruster Brakes

INTRODUCTION

Thruster Brake is device to retard the speed of moving machinery and to stop it accurately to the desired position. The breaking force is applied to the brake shoes by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed, and finally stopping it.

Technical Data

ltem	Brake	Thruster
Model	MDT - 250-18	ST-520
Drum Dia	250 mm	-
Brake Shoe	Asbestos free/BA	-
Braking Torque	35 Kg-m	-
Thrust	-	18Kg
Stroke	-	51mm
Oil + Capacity	-	Transformer Oil 2 Litrs
Rated Voltage	-	415V±10%,3Ph AC,50Hz
Current At 415 V AC	-	0.4 Amps
Insulation	-	F Class
Ingress Protection	-	IP-44 IS/IEC 60529 (2001)
Surface Temperature		+50°C
Weight	23 kg	12 kg
Painting	Colour RAL 7021	



Selection of Brake Size

Electo-hydraulic thruster is a device which develops liner thrust (or force) required to operate the required mechanism. The input to the device is three phase supply.

The brake torque must be => than motor full load
as referred with drum. Formula as below:

OIL FILLER F 1/4" BSP

Where Hp/Kw = motor output & rpm = Rev/minute



Mill Duty Thruster Brakes

INTRODUCTION

Thruster Brake is device to retard the speed of moving machinery and to stop it accurately to the desired position. The breaking force is applied to the brake shoes by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed, and finally stopping it.

Technical Data

Item	Brake	Thr
Model	MDT - 250-34	ST-535
Drum Dia	250 mm	-
Brake Shoe	Asbestos free/BA	-
Braking Torque	42 Kg-m	-
Thrust	-	34Kg
Stroke	-	51mm
Oil + Capacity	-	Transform
Rated Voltage	-	415V±109
Current At 415 V AC	-	0.5 Amps
Insulation	-	F Class
Ingress Protection	-	IP-55 IS/IE
Surface Temperature		+50°C
Weight	29 kg	16 kg
Painting	Colour RAL 7021	





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MDT-250-18

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Selection of Brake Size

Electo-hydraulic thruster is a device which develops liner thrust (or force) required to operate the required mechanism. The input to the device is three phase supply.

The brake torque must be => than motor full load as referred with drum. Formula as below:

- T = Torque in Kgm = $716 \times Hp$
- T = Torque in Nm = $9552 \times Kw$

Where Hp/Kw = motor output & rpm = Rev/minute





MDT 300-18 Mill Duty Thruster Brakes

INTRODUCTION

Thruster Brake is device to retard the speed of moving machinery and to stop it accurately to the desired position. The breaking force is applied to the brake shoes by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed, and finally stopping it.

Technical Data

ltem	Brake	Thruster
Model	MDT - 300-18	ST-520
Drum Dia	300 mm	-
Brake Shoe	Asbestos free/BA	-
Braking Torque	42 Kg-m	-
Thrust	-	18Kg
Stroke	-	51mm
Oil + Capacity	-	Transformer Oil 2 Litrs
Rated Voltage	-	415V±10%,3Ph AC,50Hz
Current At 415 V AC	-	0.4 Amps
Insulation	-	F Class
Ingress Protection	-	IP-44 IS/IEC 60529 (2001)
Surface Temperature		+50°C
Weight	26 kg	12 kg
Painting	Colour RAL 7021	



Selection of Brake Size

Electo-hydraulic thruster is a device which develops liner thrust (or force) required to operate the required mechanism. The input to the device is three phase supply.

The brake torque must be => than motor full load
as referred with drum. Formula as below:

Where Hp/Kw = motor output & rpm = Rev/minute

Multitech Systems MDT 300-34 Mill Duty Thruster Brakes

INTRODUCTION

Thruster Brake is device to retard the speed of moving machinery and to stop it accurately to the desired position. The breaking force is applied to the brake shoes by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed, and finally stopping it.

Technical Data

ltem	Brake	Thr
Model	MDT - 300-34	ST-535
Drum Dia	300 mm	-
Brake Shoe	Asbestos free/BA	-
Braking Torque	62 Kg-m	-
Thrust	-	34Kg
Stroke	-	51mm
Oil + Capacity	-	Transforn
Rated Voltage	-	415V±109
Current At 415 V AC	-	0.5 Amps
Insulation	-	F Class
Ingress Protection	-	IP-44 IS/IE
Surface Temperature		+50°C
Weight	34 kg	16 kg
Painting	Colour RAL 7021	









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Selection of Brake Size

Electo-hydraulic thruster is a device which develops liner thrust (or force) required to operate the required mechanism. The input to the device is three phase supply.

The brake torque must be => than motor full load as referred with drum. Formula as below:

- T = Torque in Kgm = $716 \times Hp$
- T = Torque in Nm = $\frac{9552 \times Kw}{rom}$

Where Hp/Kw = motor output & rpm = Rev/minute





MDT 300-46 Mill Duty Thruster Brakes

INTRODUCTION

Thruster Brake is device to retard the speed of moving machinery and to stop it accurately to the desired position. The breaking force is applied to the brake shoes by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed, and finally stopping it.

Technical Data

Item	Brake	Thruster
Model	MDT - 300-46	ST-545
Drum Dia	300 mm	-
Brake Shoe	Asbestos free/BA	-
Braking Torque	72 Kg-m	-
Thrust	-	46Kg
Stroke	-	51mm
Oil + Capacity	-	Transformer Oil 2 Litrs
Rated Voltage	-	415V±10%,3Ph AC,50Hz
Current At 415 V AC	-	0.6 Amps
Insulation	-	F Class
Ingress Protection	-	IP-44 IS/IEC 60529 (2001)
Surface Temperature		+50°C
Weight	34 kg	18 kg
Painting	Colour RAL 7021	



Selection of Brake Size

Electo-hydraulic thruster is a device which develops liner thrust (or force) required to operate the required mechanism. The input to the device is three phase supply.

The brake torque must be => than motor full load
as referred with drum. Formula as below:

T = Torque in Kgm =
$$\frac{716 \text{ x Hr}}{\text{rpm}}$$

DRAIN PLU

Where Hp/Kw = motor output & rpm = Rev/minute

Multitech Systems MDT 300-68 Mill Duty Thruster Brakes

INTRODUCTION

Thruster Brake is device to retard the speed of moving machinery and to stop it accurately to the desired position. The breaking force is applied to the brake shoes by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed, and finally stopping it.

Technical Data

ltem	Brake	Thr
Model	MDT - 300-68	ST-870
Drum Dia	300 mm	-
Brake Shoe	Asbestos free/BA	-
Braking Torque	90 Kg-m	-
Thrust	-	68Kg
Stroke	-	76mm
Oil + Capacity	-	Transform
Rated Voltage	-	415V±109
Current At 415 V AC	-	0.7 Amps
Insulation	-	F Class
Ingress Protection	-	IP-55 IS/IE
Surface Temperature		+50°C
Weight	34 kg	30 kg
Painting	Colour RAL 7021	





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MDT-300-46

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Selection of Brake Size

Electo-hydraulic thruster is a device which develops liner thrust (or force) required to operate the required mechanism. The input to the device is three phase supply.

The brake torque must be => than motor full load as referred with drum. Formula as below:

- T = Torque in Kgm = $716 \times Hp$
- T = Torque in Nm = $9552 \times Kw$

Where Hp/Kw = motor output & rpm = Rev/minute



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MDT 400-34 Mill Duty Thruster Brakes

INTRODUCTION

Thruster Brake is device to retard the speed of moving machinery and to stop it accurately to the desired position. The breaking force is applied to the brake shoes by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed, and finally stopping it.

Technical Data

Item	Brake	Thruster
Model	MDT - 400-34	ST-535
Drum Dia	400 mm	-
Brake Shoe	Asbestos free/BA	-
Braking Torque	90 Kg-m	-
Thrust	-	34Kg
Stroke	-	51mm
Oil + Capacity	-	Transformer Oil 2.5 Litrs
Rated Voltage	-	415V±10%,3Ph AC,50Hz
Current At 415 V AC	-	0.5 Amps
Insulation	-	F Class
Ingress Protection	-	IP-44 IS/IEC 60529 (2001)
Surface Temperature		+50°C
Weight	54 kg	16 kg
Painting	Colour RAL 7021	



Selection of Brake Size

Electo-hydraulic thruster is a device which develops liner thrust (or force) required to operate the required mechanism. The input to the device is three phase supply.

The brake torque must be => than motor full load
as referred with drum. Formula as below:

T = Torque in Kgm =
$$\frac{716 \text{ x Hr}}{\text{rpm}}$$

DRAIN PLUG 1/8* BSP-

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ST-535

Where Hp/Kw = motor output & rpm = Rev/minute



INTRODUCTION

Thruster Brake is device to retard the speed of moving machinery and to stop it accurately to the desired position. The breaking force is applied to the brake shoes by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed, and finally stopping it.

Technical Data

	1	
Item	Brake	Thr
Model	MDT - 400-46	ST-545
Drum Dia	400 mm	-
Brake Shoe	Asbestos free/BA	-
Braking Torque	110 Kg-m	-
Thrust	-	46Kg
Stroke	-	51mm
Oil + Capacity	-	Transforn
Rated Voltage	-	415V±109
Current At 415 V AC	-	0.6 Amps
Insulation	-	F Class
Ingress Protection	-	IP-55 IS/IE
Surface Temperature		+50°C
Weight	56 kg	18 kg
Painting	Colour RAL 7021	



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Multitech Systems

MDT-400-34

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ruster
ner Oil 2.5 Litrs
%,3Ph AC,50Hz
EC 60529 (2001)

Selection of Brake Size

Electo-hydraulic thruster is a device which develops liner thrust (or force) required to operate the required mechanism. The input to the device is three phase supply.

The brake torgue must be => than motor full load as referred with drum. Formula as below:

- T = Torque in Kgm = $716 \times Hp$
- T = Torque in Nm = <u>9552 x Kw</u>

Where Hp/Kw = motor output & rpm = Rev/minute



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MDT 400-68 Mill Duty Thruster Brakes

INTRODUCTION

Thruster Brake is device to retard the speed of moving machinery and to stop it accurately to the desired position. The breaking force is applied to the brake shoes by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed, and finally stopping it.

Technical Data

ltem	Brake	Thruster
Model	MDT - 400-68	ST-870
Drum Dia	400 mm	-
Brake Shoe	Asbestos free/BA	-
Braking Torque	170 Kg-m	-
Thrust	-	68Kg
Stroke	-	76mm
Oil + Capacity	-	Transformer Oil 4.5 Litrs
Rated Voltage	-	415V±10%,3Ph AC,50Hz
Current At 415 V AC	-	0.7 Amps
Insulation	-	F Class
Ingress Protection	-	IP-55 IS/IEC 60529 (2001)
Surface Temperature		+50°C
Weight	43 kg	30 kg
Painting	Colour RAL 7021	



Selection of Brake Size

Electo-hydraulic thruster is a device which develops liner thrust (or force) required to operate the required mechanism. The input to the device is three phase supply.

The brake torque must be => than motor full load
as referred with drum. Formula as below:

T = Torque in Kgm =
$$\frac{716 \text{ x Hr}}{\text{rpm}}$$

Where Hp/Kw = motor output & rpm = Rev/minute

Multitech Systems MDT 400-114 Mill Duty Thruster Brakes

INTRODUCTION

Thruster Brake is device to retard the speed of moving machinery and to stop it accurately to the desired position. The breaking force is applied to the brake shoes by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed, and finally stopping it.

Technical Data

r	1	
Item	Brake	Thr
Model	MDT - 400-114	ST-8110
Drum Dia	400 mm	-
Brake Shoe	Asbestos free/BA	-
Braking Torque	290 Kg-m	-
Thrust	-	114Kg
Stroke	-	76mm
Oil + Capacity	-	Transforn
Rated Voltage	-	415V±109
Current At 415 V AC	-	0.8 Amps
Insulation	-	F Class
Ingress Protection	-	IP-55 IS/IE
Surface Temperature		+50°C
Weight	43 kg	35 kg
Painting	Colour RAL 7021	









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Selection of Brake Size

Electo-hydraulic thruster is a device which develops liner thrust (or force) required to operate the required mechanism. The input to the device is three phase supply.

The brake torgue must be => than motor full load as referred with drum. Formula as below:

- T = Torque in Kgm = $716 \times Hp$
- T = Torque in Nm = $9552 \times Kw$

Where Hp/Kw = motor output & rpm = Rev/minute





MDT 500-34 Mill Duty Thruster Brakes

INTRODUCTION

Thruster Brake is device to retard the speed of moving machinery and to stop it accurately to the desired position. The breaking force is applied to the brake shoes by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed, and finally stopping it.

Technical Data

Item	Brake	Thruster
Model	MDT - 500-34	ST-535
Drum Dia	500 mm	-
Brake Shoe	Asbestos free/BA	-
Braking Torque	110 Kg-m	-
Thrust	-	35Kg
Stroke	-	51mm
Oil + Capacity	-	Transformer Oil 2.5 Litrs
Rated Voltage	-	415V±10%,3Ph AC,50Hz
Current At 415 V AC	-	0.5 Amps
Insulation	-	F Class
Ingress Protection	-	IP-55 IS/IEC 60529 (2001)
Surface Temperature		+50°C
Weight	90 kg	16 kg
Painting	Colour RAL 7021	



Selection of Brake Size

Electo-hydraulic thruster is a device which develops liner thrust (or force) required to operate the required mechanism. The input to the device is three phase supply.

The brake torque must be => than motor full load
as referred with drum. Formula as below:

T = Torque in Kgm =
$$\frac{716 \text{ x Hp}}{\text{rpm}}$$

Where Hp/Kw = motor output & rpm = Rev/minute

Multitech Systems MDT 500-46 Mill Duty Thruster Brakes

INTRODUCTION

Thruster Brake is device to retard the speed of moving machinery and to stop it accurately to the desired position. The breaking force is applied to the brake shoes by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed, and finally stopping it.

Technical Data

Item	Brake	Thr
Model	MDT - 500-46	ST-545
Drum Dia	500 mm	-
Brake Shoe	Asbestos free/BA	-
Braking Torque	190 Kg-m	-
Thrust	-	46Kg
Stroke	-	51mm
Oil + Capacity	-	Transforn
Rated Voltage	-	415V±109
Current At 415 V AC	-	0.6 Amps
Insulation	-	F Class
Ingress Protection	-	IP-55 IS/IE
Surface Temperature		+50°C
Weight	62 kg	18 kg
Painting	Colour RAL 7021	









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Selection of Brake Size

Electo-hydraulic thruster is a device which develops liner thrust (or force) required to operate the required mechanism. The input to the device is three phase supply.

The brake torque must be => than motor full load as referred with drum. Formula as below:

- T = Torque in Kgm = $716 \times Hp$
- T = Torque in Nm = $\frac{9552 \text{ x Kw}}{rom}$

Where Hp/Kw = motor output & rpm = Rev/minute





MDT 500-68 Mill Duty Thruster Brakes

INTRODUCTION

Thruster Brake is device to retard the speed of moving machinery and to stop it accurately to the desired position. The breaking force is applied to the brake shoes by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed, and finally stopping it.

Technical Data

Item	Brake	Thruster
Model	MDT - 500-68	ST-870
Drum Dia	500 mm	-
Brake Shoe	Asbestos free/BA	-
Braking Torque	290 Kg-m	-
Thrust	-	68Kg
Stroke	-	76mm
Oil + Capacity	-	Transformer Oil 2.5 Litrs
Rated Voltage	-	415V±10%,3Ph AC,50Hz
Current At 415 V AC	-	0.7 Amps
Insulation	-	F Class
Ingress Protection	-	IP-55 IS/IEC 60529 (2001)
Surface Temperature		+50°C
Weight	60 kg	30 kg
Painting	Colour RAL 7021	



Selection of Brake Size

Electo-hydraulic thruster is a device which develops liner thrust (or force) required to operate the required mechanism. The input to the device is three phase supply.

The brake torgue must be => than motor full load as referred with drum. Formula as below:

T = Torque in Kgm =
$$\frac{716 \text{ x Hp}}{\text{rpm}}$$

Where Hp/Kw = motor output & rpm = Rev/minute



INTRODUCTION

Thruster Brake is device to retard the speed of moving machinery and to stop it accurately to the desired position. The breaking force is applied to the brake shoes by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed, and finally stopping it.

Technical Data

	1	
Item	Brake	Thr
Model	MDT - 500-114	ST-8110
Drum Dia	500 mm	-
Brake Shoe	Asbestos free/BA	-
Braking Torque	485 Kg-m	-
Thrust	-	114Kg
Stroke	-	76mm
Oil + Capacity	-	Transform
Rated Voltage	-	415V±10%
Current At 415 V AC	-	0.8 Amps
Insulation	-	F Class
Ingress Protection	-	IP-55 IS/IE
Surface Temperature		+50°C
Weight	75 kg	35 kg
Painting	Colour RAL 7021	



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Selection of Brake Size

Electo-hydraulic thruster is a device which develops liner thrust (or force) required to operate the required mechanism. The input to the device is three phase supply.

The brake torque must be => than motor full load as referred with drum. Formula as below:

- T = Torque in Kgm = $716 \times Hp$
- T = Torque in Nm = $\frac{9552 \times Kw}{rpm}$

Where Hp/Kw = motor output & rpm = Rev/minute





Lever Type Limit Switch 10A

INTRODUCTION

Lever Type Limit Switch operates the control change-over contacts of motor of an moving equipments when a cam moving with loads actuates the lever of Limit Switch. This turns the cam on a square shaft and operate the NO/NC change over contact elements.

Technical Data

Body Material	Alluminium Die Cast (Powder Coated)
Protection Degree	IP-55 Confirming to (IS/IEC- 60529(2001)
Mounting Position	Floor
Cable Entries	2, 3/4" Conduit
No. Of Contacts	MAX 2
Contact Material	Silver Cadmium
Wire Connection	Screw Terminal
Rated voltage	500 V.A.C. Max
Thermal Test	10 A
Current	



Multitech Systems Lever Type Limit Switch 40A INTRODUCTION

Lever Type Limit Switch operates the control change-over contacts of motor of an moving equipments when a cam moving with loads actuates the lever of Limit Switch. This turns the cam on a square shaft and operate the NO/NC change over contact elements.

Technical Data

Body Material	Alluminium Die Cast (Po Coated)
Protection Degree	IP-55 Confirming to (IS/II 60529(2001)
Mounting Position	Floor
Cable Entries	2, 3/4" Conduit
No. Of Contacts	MAX 4
Contact Material	Silver Cadmium
Wire Connection	Screw Terminal
Rated voltage	500 V.A.C. Max
Thermal Test	40 A
Current	



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SWITCHING DIAGRAM

LS/1SH/2(ONE WAY) 901300020002 CONTACT NO. 1 0

2(TWO WAY) 20003				
NO	. 1	0	1	
	Х	Х		
		Х	Х	

1		X			
2		Х			
			-		
	τ.		10/		2
L3/23H/4(LS/2SH/4(IWO WAY)				
901300020	00	5			
CONTACT NO	. 2	1	0	1	2
1	Х	Х	Х		
2	Х	Х	Х	х	
3		Х	Х	х	Х
4			Х	Х	X



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Lever Limit Switch (Upward Lever)



Geared Rotary Limit Switch GRLS/48/2SH

INTRODUCTION

Rotary Geared Limit Switch GRLS is used to trip Motor Supply when the moving loads reach the extreme end positions of working zone. The driving motion is transmitted by worm gear through worm shaft. The rotations & movements are transmitted to switches by adjustable cams. Complying to IEC/EN 60947-5-1, IEC/EN 60529, IES 60060-2-78 IES 60068-2-30.

Application

A Rotary Geared Limit Switch Are Suitable For Use On Reversing Drives Such As Hoists, Winches Rolling Mills & Various Other Mechanisms Used In Steel Plants Such As Coke Oven, Feeding Oven Machinery Etc.





Mechanical Data

Ratio	Effective Rotations	Useful Rotations	2 Contacts Model
48:1	48	40	GRLS/48/2SH

Technical Data :

Body Material	Aluminium Die Cast
Protection Degree	IP-55 Confirming to
	(IS/IEC : 60529(2001)
Gear Ratio	48:1
Drive	Worm Drive
Cable Entries	2x3/4" Conduit
Contact Material	Silver Cadmium
Rated Voltage Insulation	500 V.A.C.
Thermal Test Current	40 Amps
No. Of Contacts	2NC OR 2NO
Cam Setting	Adjustable

Multitech Systems

Geared Rotary Limit Switch GRLS/48/4SH

INTRODUCTION

Rotary Geared Limit Switch GRLS is used to trip Motor Supply when the moving loads reach the extreme end positions of working zone. The driving motion is transmitted by worm gear through worm shaft. The rotations & movements are transmitted to switches by adjustable cams. Complying to IEC/EN 60947-5-1, IEC/EN 60529, IES 60060-2-78 IES 60068-2-30.

Application

A Rotary Geared Limit Switch Are Suitable For Use On Reversing Drives Such As Hoists, Winches Rolling Mills & Various Other Mechanisms Used In Steel Plants Such As Coke Oven, Feeding Oven Machinery Etc.









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Mechanical Data

Ratio	Effective Rotations	Useful Rotations	2 Contacts Model
48:1	48	40	GRLS/48/4SH

Technical Data :

Body Material	Aluminium Die Cast
Protection Degree	IP-65 Confirming to
	(IS/IEC : 60529(2001)
Gear Ratio	48:1
Drive	Worm Drive
Cable Entries	2x3/4" Conduit
Contact Material	Silver Cadmium
Rated Voltage Insulation	500 V.A.C.
Thermal Test Current	40 Amps
No. Of Contacts	4NC OR 4NO
Cam Setting	Adjustable



Geared Rotary Limit Switch GRLS/60/2SH

INTRODUCTION

Rotary Geared Limit Switch GRLS is used to trip Motor Supply when the moving loads reach the extreme end positions of working zone. The driving motion is transmitted by worm gear through worm shaft. The rotations & movements are transmitted to switches by adjustable cams. Complying to IEC/EN 60947-5-1, IEC/EN 60529, IES 60060-2-78 IES 60068-2-30.

Application

A Rotary Geared Limit Switch Are Suitable For Use On Reversing Drives Such As Hoists, Winches Rolling Mills & Various Other Mechanisms Used In Steel Plants Such As Coke Oven, Feeding Oven Machinery Etc.



Mechanical Data

Ratio	Effective	Useful	2 Contacts Model
	Rotations	Rotations	
60:1	60	52	GRLS/60/2SH

Technical Data :

Body Material	Aluminium Die Cast
Protection Degree	IP-55 Confirming to
	(IS/IEC : 60529(2001)
Gear Ratio	60:1
Drive	Worm Drive
Cable Entries	2x3/4" Conduit
Contact Material	Silver Cadmium
Rated Voltage Insulation	500 V.A.C.
Thermal Test Current	40 Amps
No. Of Contacts	2NC OR 2NO
Cam Setting	Adjustable

Multitech Systems

Geared Rotary Limit Switch GRLS/96/2SH

INTRODUCTION

Rotary Geared Limit Switch GRLS is used to trip Motor Supply when the moving loads reach the extreme end positions of working zone. The driving motion is transmitted by worm gear through worm shaft. The rotations & movements are transmitted to switches by adjustable cams. Complying to IEC/EN 60947-5-1, IEC/EN 60529, IES 60060-2-78 IES 60068-2-30.

Application

A Rotary Geared Limit Switch Are Suitable For Use On Reversing Drives Such As Hoists, Winches Rolling Mills & Various Other Mechanisms Used In Steel Plants Such As Coke Oven, Feeding Oven Machinery Etc.





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Mechanical Data

Ratio	Effective	Useful	2 Contacts Model
	Rotations	Rotations	
96:1	96	84	GRLS/96/2SH

Technical Data :

Body Material	Aluminium Die Cast
Protection Degree	IP-55 Confirming to
	(IS/IEC : 60529(2001)
Gear Ratio	96:1
Drive	Worm Drive
Cable Entries	2x3/4" Conduit
Contact Material	Silver Cadmium
Rated Voltage Insulation	500 V.A.C.
Thermal Test Current	40 Amps
No. Of Contacts	2NC OR 4NO
Cam Setting	Adjustable

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Counter Weight Limit Switch 40A

INTRODUCTION

Weight Operated Limit Switches are used on control/ power circuit of reversing drives so as to limit their rotation / movement with in a predetermined position. Complying to IEC/EN 60947-5-1, IEC/EN 60529, IEC 60068-2-78, IEC 60068-2-30

Operation

When the snatch block of the crane reaches its top position the snatch block pushes a plate which is hanging from one end of the lever of the limit switch. Due to the weight placed on the other end of the lever this lever is pushed up. When the lever is pushed up the shaft to which this lever is connected rotates there by rotating the cams which eventually open the contacts

Technical Data

Body material	Powder coated, Aluminium
	Die cast
Degree of protection	IP-55 IS/IEC-600529 : 2001
Mounting position	Floor Mounting
Cable Entries	Twin, 3/4" BS conduit
No. of contact	2
Contact	Silver-cadmium
Wire connection	Screwed Terminals
Thermal Test Current	40 A
Rated Voltage	500 VAC



Switching Diagram

CWLS/1SH/1 4044000000

101400020001					
CONTACT NO.	0	1			
1	Х				

CWLS/1SH/2 101400020002



CWLS/1SH/11 101400020003 CONTACT NO. 0 1 Х 2

Х



Multitech Systems Anti-Collision Limit Switch INTRODUCTION

The anti-collision system is a safety device to avoid collision of two electric overhead travelling cranes on the same bay. The system works on the principle of retro-reflective infrared waves.

The system comprises of an emitter cum receiver module and a reflector. The emitter continuously emits infrared waves into the direction of the reflector. The waves are reflected back to the receiver end of the system which activates an alarm signal to an stops/reduce the speed of the crane. If two cranes are away from each other the reflected waves will not reach the sensor and the cranes operate normally.

The advanced digital anti-collision system incorporates a Micro-Controller Based Circuit for taking digital inputs for easy range setting and gives an accurate cut-off range to the device. Two sets of anti-collision systems are required for collision avoidance between the two cranes.

Technical Specifiactions:

(MTSACD 0-10)
110VAC - 220VAC
Upto 70C
Upto 2 Potential free relays
1 - 3 / 3 - 10 meters

Installation Procedure:

1.Mount the Transmitter/Emitter(Control Unit) on one crane as shown in installation scheme.

2.Connect the power supply as per the connection diagram. 3. Press the laser switch and mark the point for reflector mounting. Mount the reflector on the second crane. **4**.Similarly follow the procedure to mount the control unit and reflector for the other crane.

5.Connect the relay output as shown in the figure. The Anticollision device works like an LT limit switch.

Range Adjustment Setting:

1. Make sure the system is powered off.

2. For Relay 1, keeping Inc key pressed, power on the system For Relay 2, keeping the Shift key pressed, power on the system. The display should show SET/(r11) or SET/(r12), then show digit (d00).

3. Using the Inc. key, set the number to the distance at which the relay should cut-off.

4. After selecting the range, press the Set key. 5. Restart the system.



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SIDE VIEW



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Typical installation



Master Controller(IP-41)

INTRODUCTION

Master Controller Is Housed In Enclosure And Provided With An Easily Removable Cover With Ample Area For Maintenance. The Cam Shaft Is Mounted On Bearing Bushes On Walls Of Housing. The Cam Are Made Of Thermoplast Material And Fixed On Square Spindle Switch Which Is Moved By A Handle. The Cams Are Cut To Correspond To The Switching Program Aluminium Die Cast Powder Coated Suitable For Hoist-Grab. Mill Duty, E. O. T. Cranes And Rolling Mill Drives.

Technical Data :

Body Material	Aluminium Die Cast
Protection Degree	IP - 41 (IS/IEC-60529(2001)
Mounting Position	Horizontal
Contact Material	Silver Cadmium
Rated Voltage	500 V. A. C.
Thermal Test Current	10 Amps.
Cable Entries	2 X 20, 2 x 26
	standard conduct
Input Speed	1200 RPM, Maximum
Contacts	Single break
No. of Contacts	24 maximum
No. of Steps	6-0-6 maximum
Optional	Spring return /Deadman's
	handle arrangment



Sheet Steel Enclosure (IP 41)

Dimension Details							
Туре	L	D	No. Of	No. Of Cab	ble Entries		
			Contacts	Dia 20	Dia 26		
1	135	105	8	2	2		
2	195	165	12	2	4		
3	245	215	18	2	4		
4	305	265	24	2	6		



Sheet Steel Enclosure (IP 41)



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Multitech Systems Master Controller(IP-54) INTRODUCTION

Master Controller Is Housed In Enclosure And Provided With An Easily Removable Cover With Ample Area For Maintenance. The Cam Shaft Is Mounted On Bearing Bushes On Walls Of Housing. The Cam Are Made Of Thermoplast Material And Fixed On Square Spindle Switch Which Is Moved By A Handle. The Cams Are Cut To Correspond To The Switching Program Aluminium Die Cast Powder Coated Suitable For Hoist-Grab, Mill Duty, E. O. T. Cranes And Rolling Mill Drives.

Technical Data :

Aluminium Die C
IP - 54 (IS/IEC-6
Horizontal
Silver Cadmium
500 V. A. C.
40 Amps.
2 X 20, 2 x 26
standard conduc
1200 RPM, Maxi
Single break
24 maximum
6-0-6 maximum
spring return /de
handle arrangme







Aluminum Die Cast

Dimension Details								
Type	۸	D	C	No. Of	No. Of Ca	ble Entries		
туре	A		C	C		Contacts	Dia 20	Dia 25
Small	170	220	150	8	1	1		
Medium	267	317	245	16	2	2		
Big	370	420	140	24	2	2		

Aluminium Die Cast



Punched Grid Resistance Box - PS

INTRODUCTION

Resistance Boxes Are Used To Add Resistance Into An Electric Motor Circuit For Modifying The Performance Characteristic Of Slipring Induction Motor Of Eot Cranes, Rubber Mills, Steel Rolling Mills, Cement Mills, Power Plants, Conveyors, Coke Oven, Blowers Etc. For Speed Control And Developing Starting Torque With Low Starting Currents. They Are Also Used As Dynamic Braking For Vvvf Ac Drives, Electric Loading Of Ac Alternators, Degenerators And Dynamometers. Resistors Are Designed To Meet Requirements Of Both A.c & D.c. Applications.



Technical Data Dynamic Breaking Resistor

Type Of Grid	Punched Grid
Cooling	Natural Air cooled
Resistors Material	Stainless Steel / Fechral
Enclosure	Sheet Steel (Galvanized)
Mounting	Floor Mounting Horizontal
Cable Entry	Bottom
Protection Degree	IP-20 / IP-21 / IP-23 / IP-33.
Over Ambient	375° C
Temperature	
Current Rating	8 Amps3000 Amps
Connections	Series / Parallel
Voltage	600 V
Terminals	3/8"
Other Voltage	1100/3300 V on request

Resistance Boxes

Current rating chart for punched grid

resistors for 375°C temperature rise

Grid Type	Rated value	Current rating for various duty factors (Amps)				
	(Ohms)	25% ED	40 %ED	60%ED	100%ED	
PS10	0.010	390	325	280	234	
PS15	0.015	318	265	228	190	
PS22	0.022	265	220	190	158	
PS32	0.032	220	182	153	131	
PS46	0.046	185	151	130	110	
PS68	0.068	152	126	110	90	
PS100	0.100	125	103	88	74	
PS150	0.150	101	84	72	61	
PS220	0.220	83	70	59	50	
PS300	0.300	82	59	50	43	
PS460	0.460	58	48	40	35	
PS720	0.720	47	39	33	28	
PS1000	1.000	40	33	28	24	
PS1500	1.500	32	27	23	19	
PS2500	2.500	25	21	18	15	
PS4500	4.500	15	13	11	8	



Resistance Boxes (PS)

Dimension Details of Punched Stainless **Steel Resistance Boxes**

Unit	Α	а	b	Unit	Α	а	b	Н
Size				Size				
A1	430	380	360	B1	580	530	510	280
A2	430	380	360	B2	580	530	510	560
C1	730	680	650	D1	880	830	805	280
C2	730	680	650	D2	880	830	805	560
C3	730	680	650	D3	880	830	805	840
C4	730	680	650	D4	880	830	805	1120
C5	730	680	650	D5	880	830	805	1400
C6	730	680	650	D6	880	830	805	1680

Multitech Systems Dynamic Braking Resistor PS INTRODUCTION

Braking Resistor are used in the D.C. Link of the frequency converter. A braking chopper activates the resistor. If the output frequency converter drops-be it by a control process, a drop in speed or a braking operation-below the current operating frequency of the motor, the motor takes on the function of a generator./ The consequence is arise in the link voltage. If this voltage exceeds the specific value of the unit in question, chopper the specific value of the unit in resistor. If the voltage drops to a value just above the grid voltage of the link, the chopper will interrupt the circuit. This process will be repeated until the motor speed once again matches the applied operating frequency. The braking resistor takes on the energy and converts it into heat.

Braking Resistor Operating Modes

Braking Resistor are usually only activated for a short time, save the braking energy and give off the short time, save the braking energy and give of the stored heat to the environment during the breaks when they are inactive. This intermittent operation with a cyclic duration factor (c.d.f) indicated in % of the duty cycle time. The duty cycle time TSP is calculated from the total of the braking time to plus resting timer. The overload capacity of the resistor is dependent on the thermal time constant and thus on the design, among others.

The Resistance Value Of The **Braking Resistors**

In general, the resistance value of a braking resistor is not critical, If may range between the lowest value of the admissible value for the braking chopper and a maximum value where the required braking performance is still achieved. Assuming a standard reserved of 25% which takes into account the manufacturing tolerance and the resistance change to heating up as well as the lower mean value of the link voltage as compared with the chopper activating voltage, the maximum value for the braking resistor is calculated as:



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Resistance Boxes (PS)

Dimension Details of Punched Stainless Steel Resistance Boxes

Unit	Α	а	b	Unit	Α	а	b	н
Size				Size				
A1	430	380	360	B1	580	530	510	280
A2	430	380	360	B2	580	530	510	560
C1	730	680	650	D1	880	830	805	280
C2	730	680	650	D2	880	830	805	560
C3	730	680	650	D3	880	830	805	840
C4	730	680	650	D4	880	830	805	1120
C5	730	680	650	D5	880	830	805	1400
C6	730	680	650	D6	880	830	805	1680





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STEM

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- -30°C +80°C-

stop, •	Power Supply	:	3V
echargeable battery.	Weight	:	About 350 gms
g protrusion)	Housing	:	Nylon Fiber
RECEIVER			
50Hz • 5 mm •	Relay output Antenna Weight	:	10A/250V External About 550 g





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TELECRANE® RADIO REMOTE CONTROL



LED for self diagnosis





GE	NE	RAL

F24-T0D

R/H

SELTH

LEFT

• Range

- Temperature
- 100M Approx. -30°C - +75°C-

TRANSMITTER

• Power Supply : • Weight

• Housing

3VDC About 260gms Nylon Fiber

R	Ε	C	Ε	I\	/E	R

0Hz	•	Housing	:	Nylon Fiber
mm	•	Weight	:	About 1225 gms

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TELECRANE® RADIO REMOTE CONTROL

-1 with eps LED for o	Joystick-1 with 5 Steps ON/OFF Fundion
	Nylon Fibre Housing Start / Hooter Push Buttons
-Stage Je Switch Mushi Emerg	room bency p b b b com s stage Toggle Switch 2-Stage Toggle Switch
GENE	RAL
or based or based	 Range : 100M Approx. Temperature : -30°C - +80°C
TRANSM	<u>NITTER</u>
stop, ery. protrusion)	 Power Supply : 3V Weight : about 260gms Housing : Nylon Fiber
RECE	VER
50Hz 0 mm	 Power Supply : 110A/25V Housing : Nylon Fiber Weight : About 1225 gms
/Stems Krishna Colony 04, Haryana	Opp. 9911417747 9560063747 0010043747

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SV-3S / 3D Push Buttons Pendent SV / 5 S **SV-5S Push Buttons Pendent** 2 + 1 - Single Speed / Two Speed Description : 2 Push Button with 1 NO / (1 NO + 1 NO) 4 + 1 - Single Speed Description : 4 Push Button with 1 NO Contact + 1 Emergency Stop with 1 NC Contact Progressives Contacts + 1Emergency Stop with 1 NC Contact SV / 3 S STOP Ā Ē DOWN <u>í</u> € (\mathbf{I}) 335 $(\hat{\mathbf{1}})$ Õ 00 $(\overline{})$ 0 \bigcirc Single Speed Single Speed Θ Ô 67.5 0 • Weight: 450 gm Weight : 570 Gm. Multi Speed Multi Speed SH/6S **SV-7S / 7D Push Buttons Pendent** SH-6S / 6D Push Buttons Pendent ALARM Description : 6 Push Button with 1 NO /2 NO Contacts 2 + 2 - Single Speed • Description: 4 Push Button with 1 NO Contacts + 1Emergency Stop with 1 NC Contact + 1Emergency Stop with 1 NC Contact + Start / Alarm with 2 No Contacts SV / 7S Single Speed Multi Speed STOP \odot REVERSE Ø 8-24 SV / 7D SV / 7D1 SV / 7D2 SV / 7D3 STOP \square (\mathbf{I}) **F** DOWN (\mathbf{v}) Ôe • 445 DOWN 1 0 RIGHT (\mathbf{r}) ∢ (\mathbf{r}) 00 0 0 FORWAR 0000 2 LEFT \bigcirc REVERSE Single Speed 00 REVERSE ٢ FORV REVERSE $\Theta\Theta$ ∢ $\langle \mathbf{x} \rangle$ 0 RIGHT 67.5 94 00 • RIGH U U. REVERS . FORWARD 67 108 REVERSE Multi Spee \bigcirc Weight : 830 Gm. Weight : 680 gm. SV-8S & 8D Push Buttons Pendent SH-8S / 8D Push Buttons Pendent 6 + 2 - Single / Double Speed Description : 6 Push Button with 1 NO / 2 NO Contacts 6 + 2 - Two Speed Description : 6 Push Button with (1NO) / (1NO+1NO) SH / 8D SH/8D3 SV/8D SV/8D1 SV/8D2 SV / 8D + 1 Emergency Stop with 1 NC Contact Progressive Contacts ALARM STOP STOP STOP STOP START ALARM START + 1 Start / Alarm with 2 NO Contact + 1Emergency Stop with 1 NC Contact + Start / Alarm with 2 No Contacts \bigcirc ()SV / 8S START ALARM START ALARM • START REVERS⁷ REVERSE FORWARD REVERSI $\mathbf{\tilde{b}}$ Single Speed Multi Spee ALARN Ø 8-24 • ◄ **BICHT** Ø 8-24 SH/8D8 F ALARM STOP ତ B FORWARD FORWARI LEFT $\langle \mathbf{F} \rangle$ 0 BO 0 38 REVERSE 0 \odot 60 0 Single Speed 0 LEFT FORWARD **@** 00 ð 00 0 0. 67.5 75 00 $\mathbf{\Theta}$ 4 0 94 108 67 Weight : 1040 gm. Multi Speed Weight : 840 Gm. -----



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SH-12S Push Button Pendent SH/12S SH-12D Push Button Pendent FORWARD LEFT STOP 10 + 2 - Single Speed Description :10 Push Button with 1 NO Contact 10 + 2 - Two Speed Description :10 Push Button with (1 NO + 1 NO) SH/12D SH/12D1 SH/12D2 SH/12D3 1:10 Push Button with (I NO T I NO) Progressive Contacts + 1 Emergency Stop with 1 NC Contact + 1 Start / Alarm with 2 NO Contact ↓ + 1 Emergency Stop with 1 NC Contact + 1 Start / Alarm with 2 NO Contact ALARM ALARM ALARM STOP STOP ۲ Ø 8-24 REVERSE REVERS FORWARD FORWARD REVERSE REVERSI ORWARI FORWARD -LEFT RIGHT -LEFT RIGHT RIGHT -۲ RIGHT PIGHT Ø 8-24 Q, \bigcirc 0 0 665 00 0 ... 00 BO 460 00 $\bigcirc \bigcirc \bigcirc$ 83 00 00 89 $\bigcirc \bigcirc$ 00 604 (\mathbf{f}) 00 $\bigcirc \ominus \ominus$ 00 00 Single Speed \overline{OO} ... 00 0 Ø 108 67 Single Spee 108 .67_ Multi Speed Weight : 1280 gm. Weight : 1390 gm SH/14S **SH-14D Push Button Pendent SH-14S Push Button Pendent** START ALARM 12 + 2 - Single Speed Description :1 Push Button with 1 NO Contact + 1 Emergency Stop with 1 NC Contact + 1 Start / Alarm with 2 NO Contact STOP 12 + 2 - Two Speed Description :12 Push Button with (1 NO + 1 NO) Progenssive Contacts + 1 Emergency Stop with 1 NC Contact + 1 Start / Alarm with 2 NO Contact ALARM ALARM ALARM STOP STOP STOP Õ Ø 8-24 (f) ٢ ٢ \odot ۲ € ۲ 谢 ۲ REVERSE ∢ REVERSE ۲ REVERS RIGHT LEFT LEFT () RIGHT () RIGHT ۲ RIGHT Ð Ø 8-24 Ø¢ TA 0 665 0 Î 00 ÎĮ ______ 10 BO \bigcirc 460 83 00 00 60 . 88 00 60 \bigcirc 00 60 0 00 $\bigcirc \ominus \ominus$ (()) Single Speed 00 € **(()** 0 ... 00 67 Single Spee 108 Θ 108 67

Multitech Systems

AC SOLENOIDS BRAKES

Technical Specification

Model	EMD - 4	EMD - 5.5	EMD - 7
Item Code			
Drum Dia (mm)	4" (101.6mm)	5.5" (139.7mm)	7" (177.8mm)
Breaking Torque (Kgm)	1.36	4.8	10.2
Stroke (mm)	25	31.4	31.4
Voltage Input	415	415	415
Holding Voltage	415	415	415
Operating	Ambient	Ambient	Ambient
Temperature	Temp.	Temp.	Temp.
Coil	CLASS F Insulation	CLASS F Insulation	CLASS F Insulation
Rating	Intermittent	Intermittent	Intermittent
No of	720	720	720
Operations	Operations/Hr	Operations/Hr	Operations/Hr
Total Weight (kg)	5.5 Kg	11.5 Kg	15.5 Kg

Dimensions (mm)

BRAKE SIZE	TORQUE RAING N.m.	TORQUE RAING N.m.	А	в	с	D	E	F	G	н	J	к	Р	Q	R
4.0"	13.6	1.3	102	73	178	67	32	140	78	10	16	73	79	76	79
5.5"	48	4.8	140	102	240	89	32	213	105	11	25	124	79	95	79
7.0"	102	10.2	178	127	291	111	64	241	127	14	25	124	79	121	79

G.A. Drawing



ULTITECT **NITS** STEM **INDIA**

Weight : 1280 gm

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9911417747 9560063747 **`** 9910043747 9911283747

Multi Speed

Weight : 1390 gm.



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FESTOON / C RAIL SYSTEM

Multitech Systems LIMIT SWITCHES



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Cable Trolleys Four Wheel



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