

## Achieved Super Lightweight and Compact Winches

### ■ Features

#### ● Super Lightweight and Parallel Structure

The components of aluminum cast and plastic made the winches very light. Furthermore, the winches are designed to be compact with unique winding drums and driving motors assembled in parallel. The winches can be installed in very narrow spaces.

#### ● Dust•Drip–proof and Rust Resistance

Motors and reduction gears are installed in aluminum cast cases, and electromagnetic brake, braking power units and capacitors (only SX Series) are in engineering plastic cases: which resulted in making the winches resistant well against dust, drip and rust.

#### ● Grease Lubrication

An urea grease of high quality lasts for so long time that frequent lubrications is not needed. It is free to install the winches at any position, such as on floors, on walls or even upside down. The winches were designed to be quiet and compact mobility. (Except the case of installing on floors, clients are requested to contact us in advance due to the problems such as weep holes.)

#### ● High Quality Built–in Motor

Built–in motors are installed in aluminum cast cases and supplied with F–Type insulation (durable up to max. 155° C) and B–Type insulation (durable up to max. 130° C).

#### ● Safe and High Efficiency Electromagnetic Brake

As well as FE Series, the winches had passed in–house durable tests 300,000 times. Despite of their small sizes, these winches have been improved for strong braking power, operating accuracy and a longer life span. A brake plate is made of earth friendly materials of nonasbestos.

### ■ Specifications

MODEL			TX-503	TX-505	TX-510	SN-201	SN-203	SN-205	SN-210
Rated Load on Cable (kgs)	50Hz	1st Layer	360	600	1000	180	300	600	1000
		3rd Layer	360	600	1000	180	300	600	1000
		Top Layer	236	437	931	145	291	473	931
Rated Winding Speed of Cable (m/min)	50Hz	1st Layer	18	11.1	5.7	14.8	7.1	4	1.6
		3rd Layer	22.8	14.7	8	19.3	9.3	5.4	2.3
		Top Layer	34.8	20.2	10.3	23.8	11.5	7.4	3
Cable Winding Legth in Total (m)		1st Layer	13.2	10.5	8.5	7.5	7.5	10.5	8.5
		3rd Layer	45	36.9	30.8	26.1	26.1	36.9	30.8
		Top Layer	155.2	89.6	60	49.4	49.4	89.6	60.6
Cable Dia in Use			6	8	10	6	8	8	10
Motor	Type		Fully–Sealed and self–Cooling type			Capacitor Activated & Operated			
	Output		2.2KW			0.75KW			
	Number of poles		4P			4P			
	Rated Voltage&Current		Three Phase 380V 50HZ,4.7A			Single Phase 220V 50HZ,5A			
	Insulation		Type F			Type B			
Load Hour Factor			25%ED			25%ED			
Braking Ratio			over 150%			over 150%			
Operation			with 2 or Button switches(Indirect Operation)						
Reduction Ration			23.28	38.59	76.18	25.05	51.57	107.14	261.91
Winch Weight(Kgs)			70	70	70	70	70	70	70

### ■ Dimensions

A	B	b <sub>1</sub>	b <sub>2</sub>	C	D	E	F	G	H	I	J	K	L	M	N	X	Y	Z
538	335	82.5	120.5	300	φ 89.1	φ 190	φ 18	174.5	315	100	109	φ 15	500	345	105	290	22.5	50

