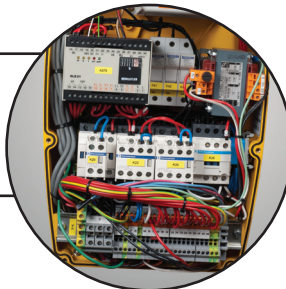


RHN Series Electric Wire Rope Hoists

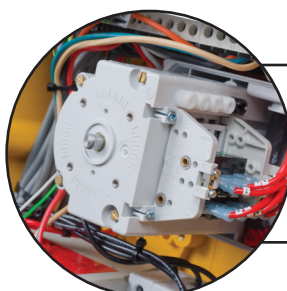
Easy Maintenance Control Panel

IP55 protection with modern controls. Components mounted on DIN rail. Equipped with main line contactor.



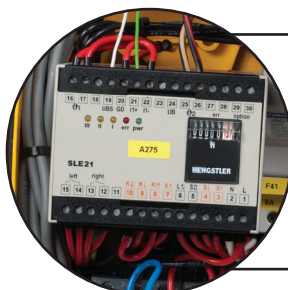
Adjustable Geared Limit Switch

Operation of switch set for upper and lower block position and emergency limit.



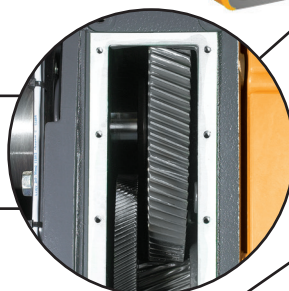
RHN Protection Unit (RPU)

With motor management, overload cut-off and count hour meter.



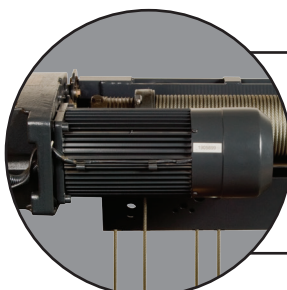
Helical Gearing

Provides maintenance free, smooth and quiet operation.



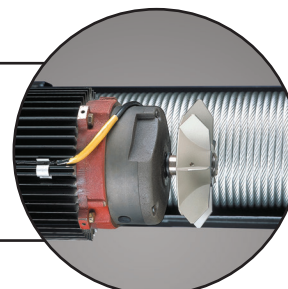
Heavy Duty Cylindrical Motor

Fan cooled (TEFC) with class F insulation and a ribbed frame for maximum cooling and durability. High protection class IP55 and positive temperature control (PTC) thermal sensors.



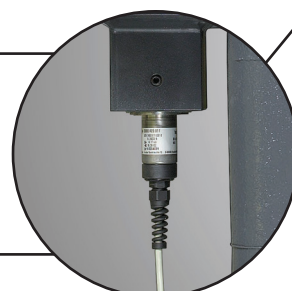
Heavy Duty Electromagnetic Brake

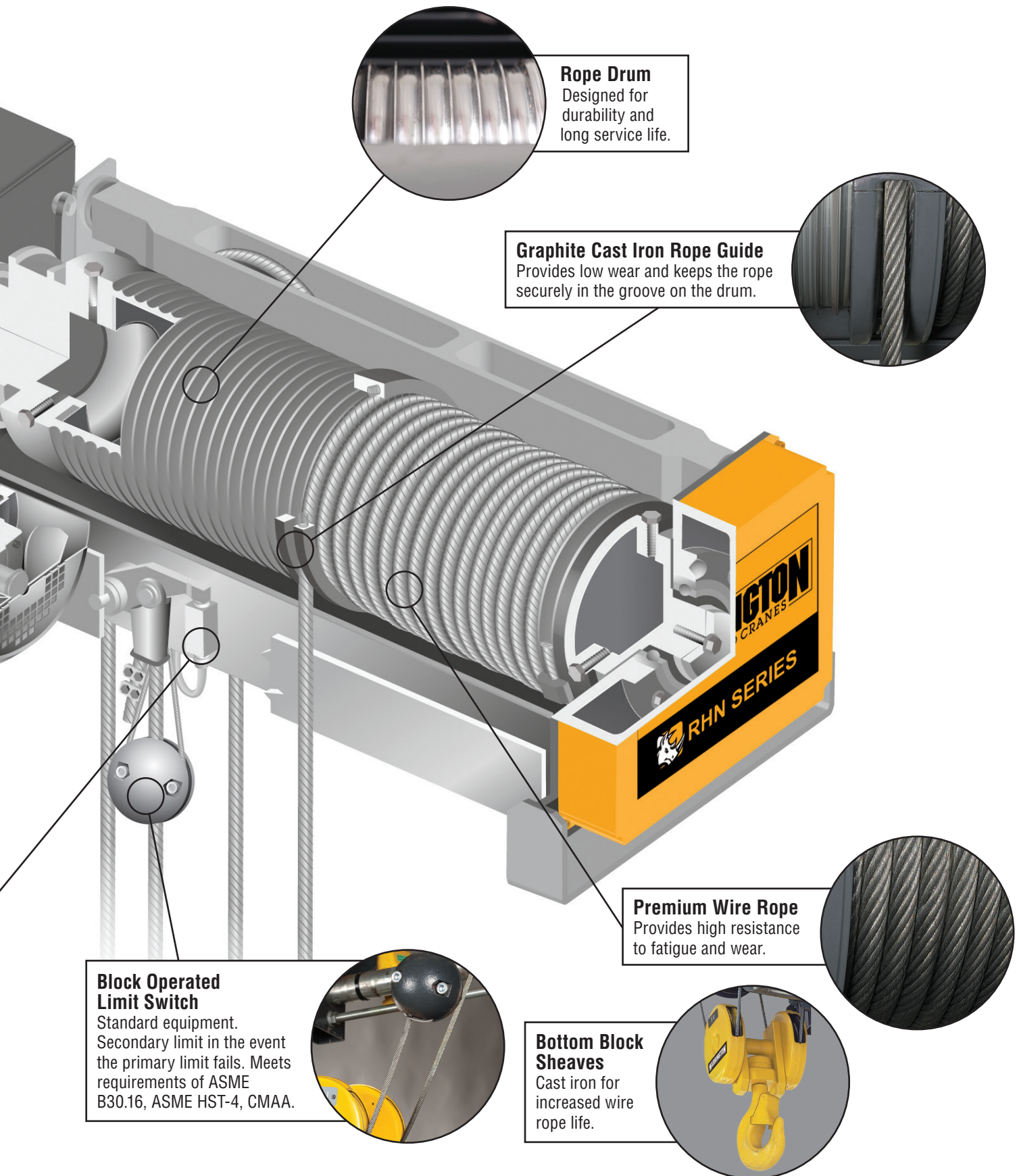
Totally enclosed and fan cooled to ensure long life. Easy to inspect. 1 million cycles.



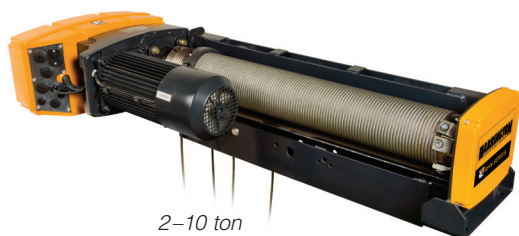
Load Limiter

Reduces the potential for making hazardous, over-capacity lifts. Overloading the hoist electrically activates the load limiter sensor, making hoist lifting inoperable.





RHN Series Electric Wire Rope Deck/Base Mounted Hoists



Harrington's high performance RHN Series Deck / Base Mounted electric wire rope hoists feature a compact, modular design that is perfect for stationary applications or combined with a double girder trolley for double girder crane systems. The basic design is ideal for hoist retro-fits on existing crane applications.

Features and Benefits

Premium Wire Rope

Provides high resistance to fatigue and wear.

Graphite Cast Iron Rope Guide

Provides low wear and keeps the rope securely in the groove on the drum.

Load Limiter

Reduces the potential for making hazardous, over-capacity lifts. Overloading the hoist electrically activates the load limiter sensor, making hoist lifting inoperable.

Helical Gearing

Provides maintenance free, smooth & quiet operation.

Easy Maintenance Control Panel

IP55 protection with modern controls. Components mounted on DIN rail. Equipped with main line contactor.

Heavy Duty Electromagnetic Brake

Totally enclosed and fan cooled to ensure long life. Easy to inspect. 1 million cycles.

Heavy Duty Cylindrical Motor

Fan cooled (TEFC) with class F insulation and a ribbed frame for maximum cooling and durability. High protection class IP55 and positive temperature control (PTC) thermal sensors.

Bottom Block Sheaves

Cast iron for increased wire rope life.

Rope Drum

Designed for durability and long service life.

Adjustable Geared Limit Switch

Operation of switch set for upper and lower block position and emergency limit.

Block Operated Limit Switch

Standard equipment. Secondary limit in the event the primary limit fails. Meets requirements of ASME B30.16, ASME HST-4, CMAA.

RHN Protection Unit (RPU)

With motor management, overload cut-off and count hour meter.

Standard Hoist Specifications

Capacity Range

2 – 20 ton

Standard Voltage

208 / 230 / 460 / 575-3-60
 RHN models are not reconnectable

Control Voltage

110V

Duty Cycle

30 / 10 min

Classification

ASME H4
 ISO M5 or M4
 FEM 2M or 1Am

Conformance

ASME B30.16
 CMAA
 UL508A
 CSA C22.2 NO.14

Ratings

Hoist – IP55

Standard Lift

20' or 33'

Reeving

4/1 (four-part single reeved)

Operating Conditions

Recommended for -4° to +104° F and humidity of 85% or less.

Adjustable Geared Limit Switch

Upper and lower standard

Mounting

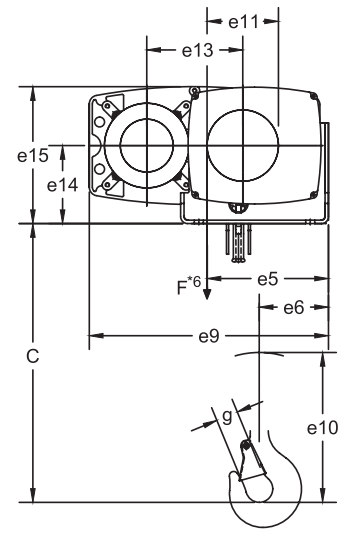
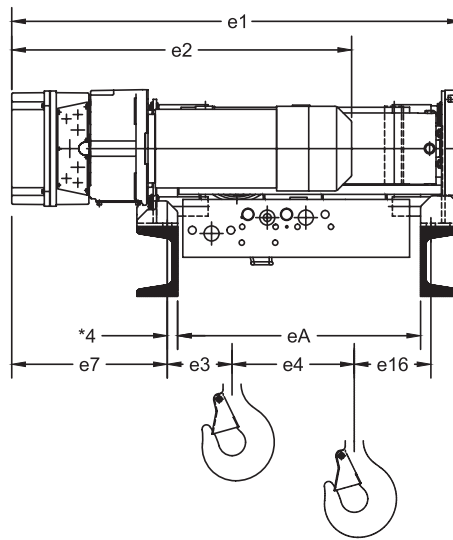
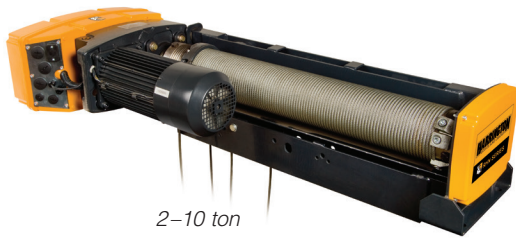
Deck / Base mount
 Consult Customer Service for Suspended Mount applications

Pendant & Pendant Cord

Optional

Power Supply Cord

Optional



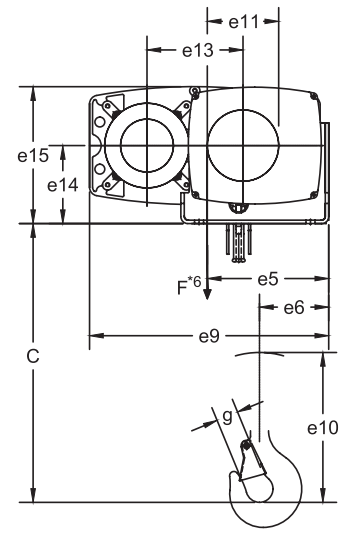
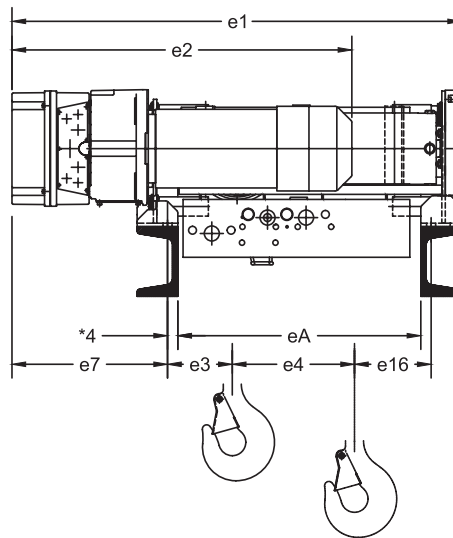
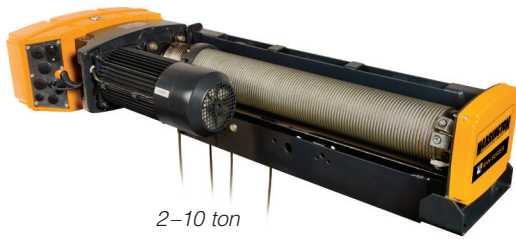
DECK/BASE MOUNTED HOISTS—SPECIFICATIONS

Capacity (t)	Product Code	Lift (ft)	Dual Lifting Speed (ft/min)	Reeving (parts/ reeving)	Rope (mm)	Dual Speed Lifting Motor 3 Phase 60Hz				Net Weight (lbs)
						Output (Hp)	Rated Current (amps) – High/Low			
							@208/230V	@460V	@575V	
2	RHN02D-20A-20D-①	20	20/3.5	4/1	7	5.8/0.9	17.0/8.4	8.3/4.0	6.6/3.2	353
	RHN02D-33A-20D-①	33								375
3	RHN03D-20A-20D-①	20	20/3.5	4/1	7	5.8/0.9	17.0/8.4	8.3/4.0	6.6/3.2	353
	RHN03D-33A-20D-①	33								375
5	RHN05D-20B-20D-①	20	20/3.5	4/1	9	7.2/1.2	22.0/11.0	10.0/5.4	8.2/4.3	452
	RHN05D-33B-20D-①	33								485
7 1/2	RHN08D-20C-20D-①	20	20/3.5	4/1	12.5	14.8/2.1	42.0/21.0	20.0/10.0	16.0/8.0	1025
	RHN08D-33C-20D-①	33								1102
10	RHN10D-20C-20D-①	20	20/3.5	4/1	12.5	14.8/2.1	42.0/21.0	20.0/10.0	16.0/8.0	1025
	RHN10D-33C-20D-①	33								1102

①
1 = 208V – 3ph – 60Hz
2 = 230V – 3ph – 60Hz
4 = 460V – 3ph – 60Hz
5 = 575V – 3ph – 60Hz

Consult Customer Service for Suspended Mount applications.

RHN Series Electric Wire Rope Deck/Base Mounted Hoists

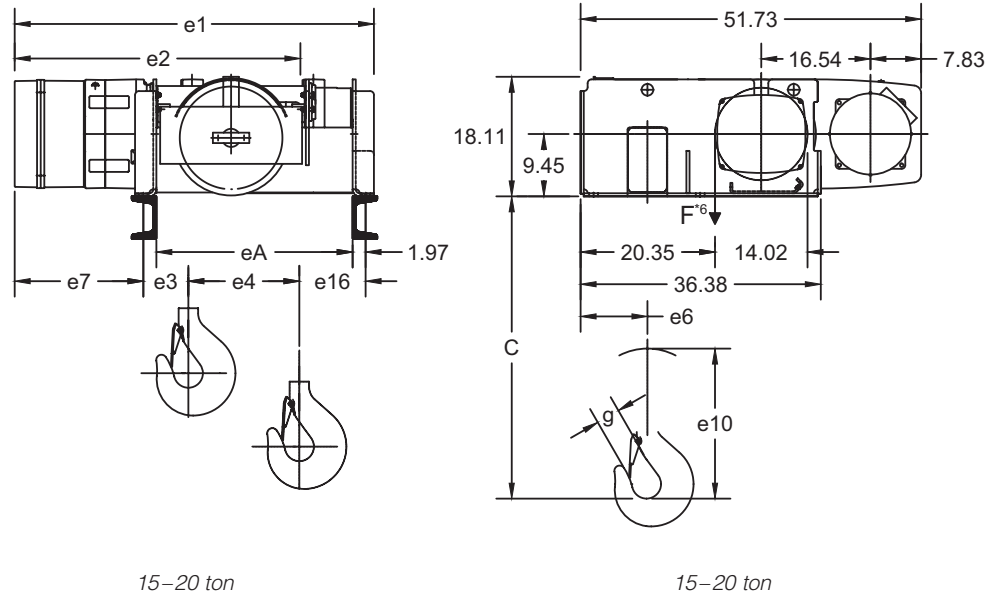


DECK/BASE MOUNTED HOISTS—DIMENSIONS

Capacity (t)	Product Code	Headroom C (in)	e1 (in)	e2 (in)	e3 (in)	e4 (in)	e5 (in)	e6 (in)	e7 (in)	e8 (in)	e9 (in)	e10 (in)	e11 (in)	e12 (in)	e13 (in)	e14 (in)	e15 (in)	e16 (in)	eA (in)
2	RHN02D-20A-20D-①	22.6	40.9	29.6	6.3	4.6	9.0	4.8	13.9	21.3	11.5	4.9	7.2	6.3	11.0	13.3	22.2	22.1	33.8
	RHN02D-33A-20D-①		52.5		6.2	7.6													
3	RHN03D-20A-20D-①	22.6	40.9	29.6	6.3	4.6	9.0	4.8	13.9	21.3	11.5	4.9	7.2	6.3	11.0	13.3	22.2	22.1	33.8
	RHN03D-33A-20D-①		52.5		6.2	7.6													
5	RHN05D-20B-20D-①	25.6	41.3	31.2	6.4	4.3	11.2	5.9	14.3	22.0	13.8	6.6	8.8	7.2	12.9	13.5	22.2	22.2	33.8
	RHN05D-33B-20D-①		52.9			7.2													
7 1/2	RHN08D-20C-20D-①	32.5	48.0	39.3	9.5	4.6	14.1	7.5	17.2	28.6	18.2	8.6	11.7	9.4	16.9	12.6	24.6	21.8	37.0
	RHN08D-33C-20D-①		60.4			7.8													
10	RHN10D-20C-20D-①	32.5	48.0	39.3	9.5	4.6	14.1	7.5	17.2	28.6	18.2	8.6	11.7	9.4	16.9	12.6	24.6	21.8	37.0
	RHN10D-33C-20D-①		60.4			7.8													

①
 1 = 208V – 3ph – 60Hz
 2 = 230V – 3ph – 60Hz
 4 = 460V – 3ph – 60Hz
 5 = 575V – 3ph – 60Hz

Consult Customer Service for Suspended Mount applications.
 See page 22 for dimensions of Deck/Base Mounted attachment points.
 *4 – Keep this dimension as small as possible.
 *6 – Force on drum.
 Note: Headroom includes standard block operated limit switch.
 g dimension – refer to page 24



DECK/BASE MOUNTED HOISTS—LARGE CAPACITY SPECIFICATIONS

Capacity (t)	Product Code	Lift (ft)	Dual Lifting Speed (ft/min)	Reeving (parts/ reeving)	Rope (mm)	Dual Speed Lifting Motor 3 Phase 60Hz				Net Weight (lbs)
						Output (Hp)	Rated Current (amps)			
							@208/230V	@460V	@575V	
15	RHN15D-20D-16D-①	20	16/2.5	4/1	20	24.1/4.0	67.0/27.0	32.0/13.0	25.6/10.4	2271
	RHN15D-33D-16D-①	33								2436
20	RHN20D-20D-16D-①	20	16/2.5	4/1	20	24.1/4.0	67.0/27.0	32.0/13.0	25.6/10.4	2271
	RHN20D-33D-16D-①	33								2436

①
1 = 208V – 3ph – 60Hz
2 = 230V – 3ph – 60Hz
4 = 460V – 3ph – 60Hz
5 = 575V – 3ph – 60Hz

DECK/BASE MOUNTED HOISTS—LARGE CAPACITY DIMENSIONS

Capacity (t)	Product Code	Headroom C (in)	e1 (in)	e2 (in)	e3 (in)	e4 (in)	e6 (in)	e7 (in)	e10 (in)	e16 (in)	eA (in)
15	RHN15D-20D-16D-①	37.0	54.4	43.7	13.4	4.6	10.9	19.5	29.7	15.7	29.7
	RHN15D-33D-16D-①		66.6			7.6				24.9	41.9
20	RHN20D-20D-16D-①	37.0	54.4	43.7	13.4	4.6	10.9	19.5	29.7	15.7	29.7
	RHN20D-33D-16D-①		66.6			7.6				24.9	41.9

①
1 = 208V – 3ph – 60Hz
2 = 230V – 3ph – 60Hz
4 = 460V – 3ph – 60Hz
5 = 575V – 3ph – 60Hz

Consult Customer Service for Suspended Mount applications.
See page 23 for dimensions of Deck/Base Mounted attachment points.
*6 – Force on drum.
g dimension – refer to page 24

RHN Series Electric Wire Rope Ultra-Low Headroom Trolley Hoists



2–15 ton

Harrington's RHN Series Ultra-Low Headroom trolley hoists combine our superior RHN hoist with an ultra-low headroom trolley and is the ideal solution for top running and underhung overhead bridge cranes. The compact body and short end approach result in the longest hook travel possible in facilities with limited usable space.

Features and Benefits

Rubber Trolley Bumpers

Standard feature on all trolleys. Provides protection from collisions. Complies with ASME standards.

Trolley Motor and Brake

Cylindrical motor with standard brake provides smooth, low-vibration acceleration and braking.

Built-In Drop Stops

Important feature provides additional security for the operator and the equipment.

Trolley Wheels

2 and 3 ton are operational on 3 1/4" patented track.

Premium Wire Rope

Provides high resistance to fatigue and wear.

Graphite Cast Iron Rope Guide

Provides low wear and keeps the rope securely in the groove on the drum.

Load Limiter

Reduces the potential for making hazardous, over-capacity lifts. Overloading the hoist electrically activates the load limiter sensor, making hoist lifting inoperable.

Helical Gearing

Provides maintenance free, smooth & quiet operation.

Easy Maintenance Control Panel

IP55 protection with modern controls. Components mounted on DIN rail. Equipped with main line contactor.

Heavy Duty Cylindrical Motor

Fan cooled (TEFC) with class F insulation and a ribbed frame for maximum cooling and durability. High protection class IP55 and positive temperature control (PTC) thermal sensors.

Heavy Duty Electromagnetic Brake

Totally enclosed and fan cooled to ensure long life. Easy to inspect. 1 million cycles.

Bottom Block Sheaves

Cast iron for increased wire rope life.

Rope Drum

Designed for durability and long service life.

Adjustable Geared Limit Switch

Operation of switch set for upper and lower block position and emergency limit.

Block Operated Limit Switch

Standard equipment. Secondary limit in the event the primary limit fails. Meets requirements of ASME B30.16, ASME HST-4, CMAA.

RHN Protection Unit (RPU)

With motor management, overload cut-off and count hour meter.

Standard Hoist/Trolley Specifications

Capacity Range

2 – 15 ton

Standard Voltage

208 / 230 / 460 / 575-3-60
RHN models are not reconnectable.

Control Voltage

110V

Duty Cycle

30 / 10 min

Ratings

Hoist / Trolley – IP55

Classification

ASME H4
ISO M5 or M4
FEM 2M or 1Am

Conformance

ASME B30.16
CMAA
UL508A
CSA 22.2 NO.14

Operating Conditions

Recommended for -4° to +104° F and humidity of 85% or less.

Mounting

Ultra-Low Headroom

Wheels

Will operate on a tapered or flat flanged beam flange.

Pendant & Pendant Cord

Optional

Power Supply Cord

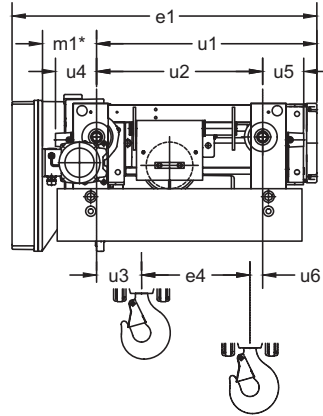
Optional

Variable Frequency Drive (VFD)

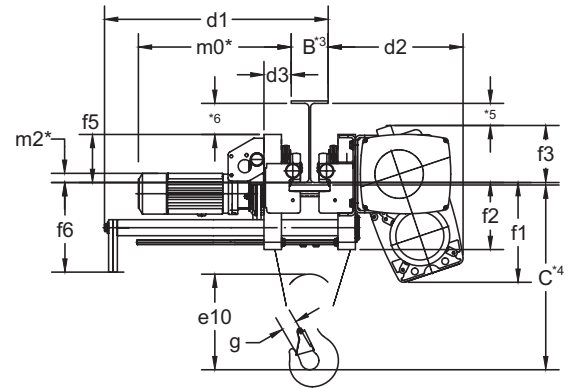
Optional on Trolley - Consult Customer Service



2-15 ton



2-15 ton



2-15 ton

ULTRA-LOW HEADROOM TROLLEY HOISTS—HOIST SPECIFICATIONS

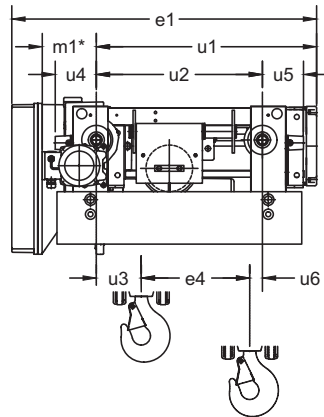
Capacity (t)	Product Code	Lift (ft)	Dual Lifting Speed (ft/min)	Reeving (parts/ reeving)	Rope (mm)	Dual Speed Lifting Motor 3 Phase 60Hz				Net Weight (lbs)
						Output (Hp)	Rated Current (amps)			
							@208/230V	@460V	@575V	
2	RHN02U-20A-20DD-①	20	20/3.5	4/1	7	5.8/0.9	17.0/8.4	8.3/4.0	6.6/3.2	617
	RHN02U-33A-20DD-①	33								650
3	RHN03U-20A-20DD-①	20	20/3.5	4/1	7	5.8/0.9	17.0/8.4	8.3/4.0	6.6/3.2	617
	RHN03U-33A-20DD-①	33								650
5	RHN05U-20B-20DD-①	20	20/3.5	4/1	9	7.2/1.2	22.0/11.0	10.0/5.4	8.2/4.3	767
	RHN05U-33B-20DD-①	33								831
7 1/2	RHN08U-20C-20DD-①	20	20/3.5	4/1	12.5	14.8/2.1	42.0/21.0	20.0/10.0	16.0/8.0	1766
	RHN08U-33C-20DD-①	33								1872
10	RHN10U-20C-20DD-①	20	20/3.5	4/1	12.5	14.8/2.1	42.0/21.0	20.0/10.0	16.0/8.0	1766
	RHN10U-33C-20DD-①	33								1872
15	RHN15U-28D-12DD-①	28	12/2.0	4/1	14	14.8/2.1	42.0/21.0	20.0/10.0	16.0/8.0	3086
	RHN15U-46D-12DD-①	46								3439

1 = 208V - 3ph - 60Hz
 2 = 230V - 3ph - 60Hz
 4 = 460V - 3ph - 60Hz
 5 = 575V - 3ph - 60Hz

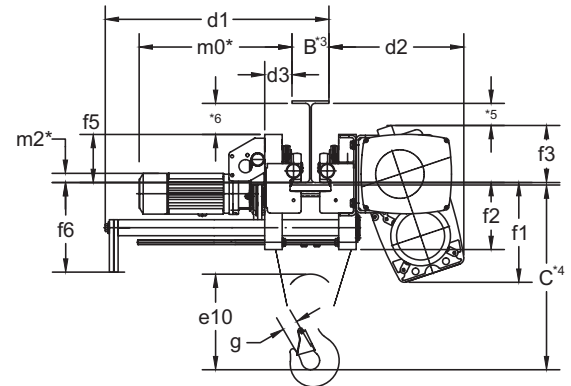
RHN Series Electric Wire Rope Ultra-Low Headroom Trolley Hoists



2–15 ton



2–15 ton



2–15 ton

ULTRA-LOW HEADROOM TROLLEY HOISTS—TROLLEY SPECIFICATIONS

Capacity (t)	Product Code	Standard Flange Range B* (in)	Dual Speed Traversing Motor 80 and 20 ft/min				
			Output (Hp)	Rated Current (amps) – High/Low			
				@208V	@230V	@460V	@575V
2	RHN02U-20A-20DD-①	3.25-12	0.59/0.15	3.0/2.3	2.6/2.0	1.3/1.0	1.0/0.8
	RHN02U-33A-20DD-①						
3	RHN03U-20A-20DD-①	3.25-12	0.59/0.15	3.0/2.3	2.6/2.0	1.3/1.0	1.0/0.8
	RHN03U-33A-20DD-①						
5	RHN05U-20B-20DD-①	3.63-12	0.59/0.15	3.0/2.3	2.6/2.0	1.3/1.0	1.0/0.8
	RHN05U-33B-20DD-①						
7 1/2	RHN08U-20C-20DD-①	4.63-12	0.89/0.21	3.7/2.8	3.2/2.4	1.6/1.2	1.3/1.0
	RHN08U-33C-20DD-①						
10	RHN10U-20C-20DD-①	4.63-12	0.89/0.21	3.7/2.8	3.2/2.4	1.6/1.2	1.3/1.0
	RHN10U-33C-20DD-①						
15	RHN15U-28D-12DD-①	8.75-12	2.01/0.48	6.9/3.2	6.0/2.8	3.0/1.4	2.4/1.1
	RHN15U-46D-12DD-①						

① 1 = 208V – 3ph – 60Hz

2 = 230V – 3ph – 60Hz

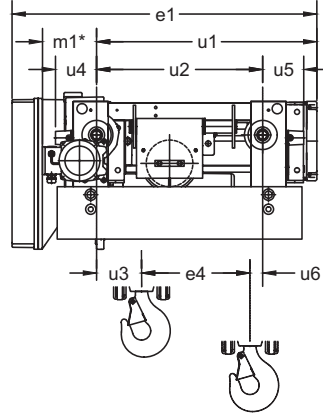
4 = 460V – 3ph – 60Hz

5 = 575V – 3ph – 60Hz

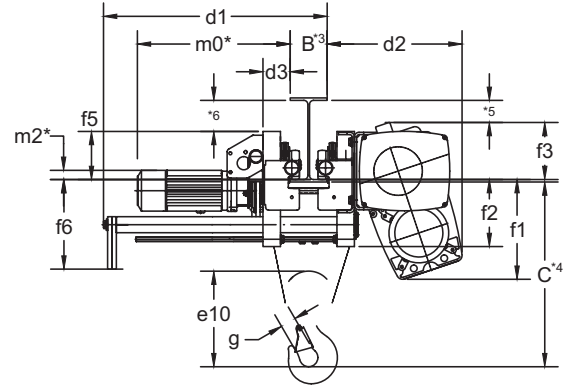
*Optional wider flange ranges available up to 19.7 inches. Consult Customer Service.



2–15 ton



2–15 ton



2–15 ton

ULTRA-LOW HEADROOM TROLLEY HOISTS—DIMENSIONS

Capacity (t)	Product Code	e1 (in)	e4 (in)	e10 (in)	d1 (in)	d2 (in)	d3 (in)	f1 (in)	f2 (in)	f3 (in)	f5 (in)	f6 (in)	u1 (in)	u2 (in)	u3 (in)	u4 (in)	u5 (in)	u6 (in)
2	RHN02U-20A-20DD-①	40.3	4.6	11.5	28.6	18.0	3.7	13.9	8.9	6.5	6.1	11.9	30.0	22.4	9.1	5.1	5.9	8.7
	RHN02U-33A-20DD-①	51.9	7.6									10.7	41.6	34.1	9.0			17.4
3	RHN03U-20A-20DD-①	40.3	4.6	11.5	28.6	18.0	3.7	13.9	8.9	6.5	6.1	11.9	30.0	22.4	9.1	5.1	5.9	8.7
	RHN03U-33A-20DD-①	51.9	7.6									10.7	41.6	34.1	9.0			17.4
5	RHN05U-20B-20DD-①	41.2	4.3	13.8	30.8	18.2	3.7	13.5	9.1	7.7	6.5	12.1	29.8	22.4	9.9	5.6	5.6	8.3
	RHN05U-33B-20DD-①	54.6	7.2							8.1	8.1	10.9	47.3	40.0	15.8			17.0
7 1/2	RHN08U-20C-20DD-①	47.2	4.6	18.2	37.0	22.9	4.5	16.1	11.4	10.7	9.8	15.7	33.7	24.6	12.6	6.7	6.7	7.4
	RHN08U-33C-20DD-①	59.6	7.8									15.0	46.1	37.0	12.6			16.6
10	RHN10U-20C-20DD-①	47.2	4.6	18.2	37.0	22.9	4.5	16.1	11.4	10.7	9.8	15.7	33.7	24.6	12.6	6.7	6.7	7.4
	RHN10U-33C-20DD-①	59.6	7.8									15.0	46.1	37.0	12.6			16.6
15*	RHN15U-28D-12DD-①	65.6†	4.6	23.0	44.4	25.2	6.6	24.5	11.8	10.0	10.0	16.7	49.4†	40.7	15.9	8.7	8.7	20.3
	RHN15U-46D-12DD-①	79.7†	7.7									15.2	69.5†	60.8	23.7			29.4

1 = 208V – 3ph – 60Hz

2 = 230V – 3ph – 60Hz

4 = 460V – 3ph – 60Hz

5 = 575V – 3ph – 60Hz

*Refer to page 14 for motor dimensions m0, m1, and m2.

*3 – Refer to page 14 for flange range dimension B (Standard Ultra-Low Headroom trolleys are suitable for use on S or W shaped beams).

*4 – Refer to page 14 for headroom dimension C.

*5/6 – Observe clearance dimensions.

† For the 15t trolley hoist model, this measurement is to the end of the trolley frame because it extends past the drum cover shown in the figure.

g dimension – refer to page 24

RHN Series Electric Wire Rope Ultra-Low Headroom Trolley Hoists

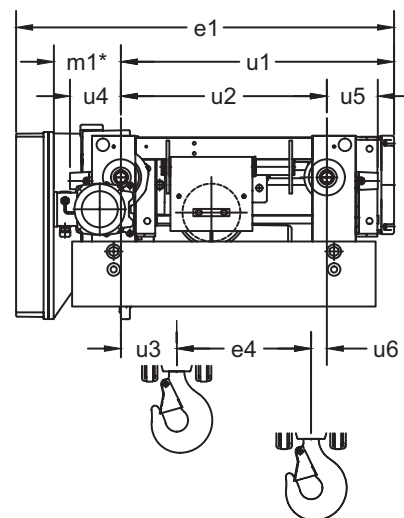
ULTRA-LOW HEADROOM TROLLEY HOIST—HEADROOM

Capacity (t)	Flange Range B (in)	Headroom C* (in)	Headroom C for 6 inch Flange (in)
2 3	3.25–4.69	22.0	21.7
	4.69–6.69	23.4–(0.29*T)	
	6.69–12	17.6+(0.58*T)	
5	3.625–4.69	26.2	26.0
	4.69–6.69	26.6–(0.10*T)	
	6.69–12	27.5–(0.23*T)	
7.5 10	4.625–6.69	33.1–(0.29*T)	31.4
	6.69–12	33.4–(0.35*T)	
15	8.75–12	40.8–(0.31*T)	38.0**

*T in formulas is the exact beam flange width in inches.

**Headroom value for 9 inch flange.

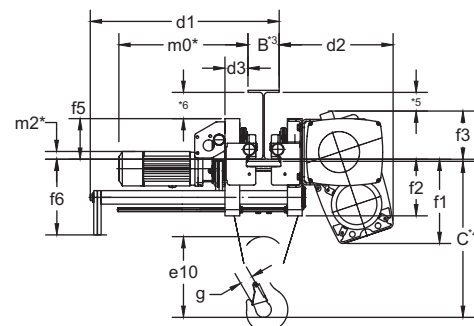
Note: Headroom includes standard block operated limit switch.



ULTRA-LOW HEADROOM TROLLEY—MOTOR DIMENSIONS*

Capacity (t)	Product Code	m0 (in)	m1 (in)	m2 (in)
2	RHN02U-20A-20DD-①	20.6	7.4	1.3
	RHN02U-33A-20DD-①			
3	RHN03U-20A-20DD-①	20.6	7.4	1.3
	RHN03U-33A-20DD-①			
5	RHN05U-20B-20DD-①	20.6	7.4	1.3
	RHN05U-33B-20DD-①			
7 1/2	RHN08U-20C-20DD-①	22.4	9.5	0.8
	RHN08U-33C-20DD-①			
10	RHN10U-20C-20DD-①	22.4	9.5	0.8
	RHN10U-33C-20DD-①			
15	RHN15U-28D-12DD-①	26.5	10.1	1.3
	RHN15U-46D-12DD-①			

①
 1 = 208V – 3ph – 60Hz
 2 = 230V – 3ph – 60Hz
 4 = 460V – 3ph – 60Hz
 5 = 575V – 3ph – 60Hz



*Refer to page 12 for trolley motor specifications.