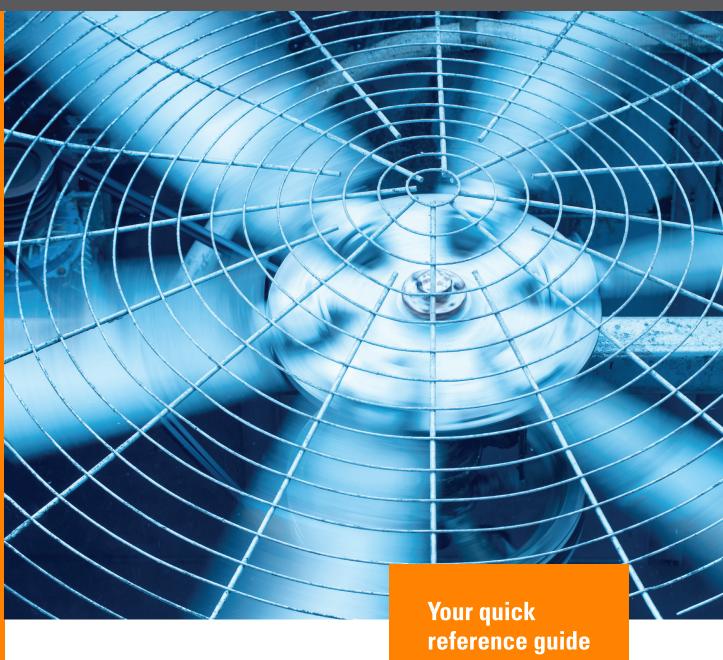
TIMKEN BELTS

# Timken® V-Belts for HVAC Applications



reference guide to selecting the right Timken® HVAC v-belt

## **Classical V-Belts**

Super Blue Ribbon® (A, B, C)

| Super II® (A-R, B-R, C-R) | Gold-Ribbon® Cog-Belt® (AX, BX, CX)



Cross Section	Timken Cross Section	Cross Section Dimensions	Belt Cutaway	Market Position	Energy Efficiency	Belt Type	Timken Brand (PN Example)	Timken Belt Description
	A	1/2" 11/32"		★ Good	93%	Wrapped Molded	Super Blue Ribbon® (A85)	Premium wrapped molded v-belt built to the highest standards in the industry. Ideal for drives with shock loads.
A	A-R	1/2"		★★ Better	94%	Raw Edge Laminated	Super II® (A85R)	The problem solver! Raw edge EPDM construction with our special CNA cord placement creates a flexible, stable and efficient v-belt.
	АХ	1/2"		<b>★★★</b> Best	95%	Raw Edge Cogged	Gold-Ribbon® Cog-Belt® (AX85)	Raw edge cogged v-belt made of EPDM provides longer belt life, higher efficiency and greater horsepower ratings than wrapped v-belts.
	В	21/32" 7/16"	00000000	★ Good	93%	Wrapped Molded	Super Blue Ribbon® ( <b>B85</b> )	Premium wrapped molded v-belt built to the highest standards in the industry. Ideal for drives with shock loads.
В	B-R	21/32" 7/16"	2000000	★★ Better	94%	Raw Edge Laminated	Super II® (B85R)	The problem solver! Raw edge EPDM construction with our special CNA cord placement creates a flexible, stable and efficient v-belt.
	вх	21/32" 7/16"	*************	<b>★★★</b> Best	95%	Raw Edge Cogged	Gold-Ribbon® Cog-Belt® (BX85)	Raw edge cogged v-belt made of EPDM provides longer belt life, higher efficiency and greater horsepower ratings than wrapped v-belts.
	С	7/8" 9/16"	*************	<b>★</b> Good	93%	Wrapped Molded	Super Blue Ribbon® (C85)	Premium wrapped molded v-belt built to the highest standards in the industry. Ideal for drives with shock loads.
С	C-R	7/8" 9/16"	******	★★ Better	94%	Raw Edge Laminated	Super II® (C85R)	The problem solver! Raw edge EPDM construction with our special CNA cord placement creates a flexible, stable and efficient v-belt.
	СХ	7/8" 9/16"	***********	<b>★★★</b> Best	95%	Raw Edge Cogged	Gold-Ribbon® Cog-Belt® (CX85)	Raw edge cogged v-belt made of EPDM provides longer belt life, higher efficiency and greater horsepower ratings than wrapped v-belts.

Wedge (Narrow) V-Belts
Super Power-Wedge® (3V, 5V, 8V) | Power-Wedge® Cog-Belt® (3VX, 5VX, 8VX)



Cross Section	Timken Cross Section	Cross Section Dimensions	Belt Cutaway	Market Position	Energy Efficiency	Belt Type	Timken Brand (PN Example)	Timken Belt Description
<b>3V</b>	3V	3/8" 5/16"		<b>★</b> Good	93%	Wrapped Molded	Super Power-Wedge® (3V850)	Our wrapped cover provides superior wear resistance. The narrow cross section enables the design of a more compact drive.
<b>3V</b>	3VX	3/8" 5/16"	*******	<b>★★★</b> Best	95%	Raw Edge Cogged	Power-Wedge® Cog-Belt® (3VX850)	Combines the advantages of the narrow cross section with EPDM and raw edge performance for operating efficiency in a compact drive package.
5V	5 <b>V</b>	5/8"		<b>★</b> Good	93%	Wrapped Molded	Super Power-Wedge® (5V850)	Our wrapped cover provides superior wear resistance. The narrow cross section enables the design of a more compact drive.
JV	5VX	5/8"	*******	<b>★★★</b> Best	95%	Raw Edge Cogged	Power-Wedge® Cog-Belt® (5VX850)	Combines the advantages of the narrow cross section with EPDM and raw edge performance for operating efficiency in a compact drive package.
οV	8V	1" 7/8"		<b>★</b> Good	93%	Wrapped Molded	Super Power-Wedge® (8V1000)	Our wrapped cover provides superior wear resistance. The narrow cross section enables the design of a more compact drive.
8V	8VX	1" 7/8"	******	<b>★★★</b> Best	95%	Raw Edge Cogged	Power-Wedge® Cog-Belt® (8VX1000)	Combines the advantages of the narrow cross section with EPDM and raw edge performance for operating efficiency in a compact drive package.

Fractional Horsepower (FHP) V-Belts Durapower®II (3L-R, 4L-R, 5L-R)								MADE IN USA
Cross Section	Timken Cross Section	Cross Section Dimensions	Belt Cutaway	Market Position	Energy Efficiency	Belt Type	Timken Brand (PN Example)	Timken Belt Description
3L	3L-R	3/8" 7/32"		<b>★★★</b> Best	94%	Raw Edge Laminated	Durapower® II (3L400R)	Raw edge, EPDM and CNA construction provide a durable, flexible and efficient fhp v-belt.
4L	4L-R	9/32"		<b>★★★</b> Best	94%	Raw Edge Laminated	Durapower® II (4L400R)	Raw edge, EPDM and CNA construction provide a durable, flexible and efficient fhp v-belt.
5L	5L-R	5/8"		<b>★★★</b> Best	94%	Raw Edge Laminated	Durapower® II" (5L400R)	Raw edge, EPDM and CNA construction provide a durable, flexible and efficient fhp v-belt.

Timken Belts Nomenclature							
Cross Section	Timken Brand	Part # Example	Timken Part Number Explanation				
Heavy Duty Belts							
A-R, B-R, C-R	R, C-R Super II® V-Belt		B = cross section, 85 = inside circumference in inches, R = raw edge construction				
A, B, C	Super Blue Ribbon® V-Belt	B85	B = cross section, 85 = inside circumference in inches				
AX, BX, CX	AX, BX, CX Gold-Ribbon®Cog-Belt®		B = cross section, X = cogged construction, 85 = inside circumference in inches				
3V, 5V, 8V	3V, 5V, 8V Super Power-Wedge® V-Belt		5V = cross section, 850 = effective length in tenths of an inch				
3VX, 5VX, 8VX	Power Wedge ®Cog-Belt® V-Belt	5VX850	5V = cross section, X = cogged construction, 850 = effective length in tenths of an inch				
Light Duty Belts							
2L-R, 3L-R, 4L-R, 5L-R	Durapower® II FHP V-Belt	4L400R	4L = cross section, 400 = outside length in tenths of inch, R = raw edge construction				
Specialty Belts							
3L, A, B, C	PowerTwist® Drive	BTwist	B = cross section, Twist = PowerTwist Drive link belting				

## **Tools and Terminology**

#### **Belt-Finder**

A belt measuring device that helps easily find the correct replacement belt. Part# 93859



#### CNA

Unique CNA (central neutral axis) cord placement positions the strength of the belt lower on the sheaves to maintain stability and flexibility.



#### Cog-Belt

Referred to as cogged or notched belts. Precision molded cogs improve belt flex and reduce bending stress.



#### Chek Mate®

Manufacturing process to meet or exceed the Association for Rubber Products Manufacturers (ARPM) tolerances for a matched set. Super Blue Ribbon, Super II, Super Power-Wedge, Power-Wedge Cog-Belt and Gold Ribbon Cog-Belt all carry the distinctive Chek Mate logo.



The Drive Engineer web app delivers robust belt drive design and analysis to your desktop or mobile device.



### **EPDM**

Ethylene Propylene Diene Monomer (EPDM) is a is a synthetic rubber that is durable and resistant to oil, heat, hardening and glazing. EPDM has superior flex and load carrying capacity with a broad operating temperature range of -50°F to +250°F.



#### Frequency-Finder

Belt tensioning tool. The Frequency-Finder is an electronic instrument that precisely measures the frequency used to calculate the static tension in belts. Part# 109061



#### Laser-Align

Laser-Align is a tool for fast and accurate alignment of belt drive pulleys. Part# 109083



#### **PowerMiser**<sup>™</sup>

PowerMiser™ is a free web app that calculates estimated annual energy savings that can be realized by upgrading to energy efficient Timken belts.



#### Raw Edge

Raw edge belts are cured and then cut into a V shape. The gripping power of raw edge sidewalls provide higher energy efficiency and reduce vibration for extended component life.



#### **Sheave Gauges**

Gauges to check sheave wear. Sheave condition and alignment are vital to v-belt life and performance. Part# 102495



#### Tension-Finder®

A quick, easy and accurate tool for tensioning v-belts. The Tension-Finder is designed for use with Timken belts. Do not use on belts with aramid, glass or carbon fiber cord. Part # 108039-A



#### **Tensiometer**

Single stem spring loaded tensioning device. The force required to deflect a span length by a given amount is related to the tension in the belt. The tensiometer measures that deflection. Part #102761



#### PowerTwist Drive®

PowerTwist Drive link belting is a perfect candidate for drives that have no take-up adjustment capability or for use as an emergency replacement belt. PowerTwist Drive can be made to the required length by hand and rolled onto the drive just like a bicycle chain. Part # 3LTwist, ATwist, BTwist, CTwist



#### Wrapped Molded

Wrapped molded belts have a fabric cover. During manufacturing the belt is molded into a V shape.



