

Optional

# SCROLL NOMENCLATURE (INCLUDING REFGN)

## Modulation

Alpha character preceding capacity when applicable

D - Digital  
 H - Horizontal  
 G - Two Stage International  
 I - Fixed Speed EVI  
 J - Digital EVI  
 S - Two Stage  
 T - Even Tandem  
 U - Uneven Tandem  
 DD - Digital/Digital Even Tandem  
 DT - Digital/Fixed Even Tandem  
 DU - Digital/Fixed Uneven Tandem  
 SS - Two Stage/Two Stage Even Tandem  
 SR - Two Stage/Two Stage Uneven Tandem  
 ST - Two Stage/Fixed Even Tandem  
 SU - Two Stage/Fixed Uneven Tandem

Y - Even Trio  
 M - Uneven Trio  
 DY - Digital/Fixed Even Trio  
 DM - Digital/Fixed Uneven Trio  
 SY - Two Stage/Fixed Even Trio  
 SM - Two Stage/Fixed Uneven Trio

Optional

A - PAO Oil  
 B - POE R134A Ref Products  
 E - POE Oil - AK/DA, 3MA or 4MA, R32  
 G - PAG Oil  
 P - POE R410A Ref Products  
 U - POE R290  
 L - Shipped Less Oil (ZB, ZF, ZS only)  
 R - POE R513A Transportation Products  
 W - POE 3MA for R290

## Nominal Capacity at Rating Condition

2 - 3 numeric characters

## Motor Protection

Type	Code
Internal Inherent Protection	F
External Electronic Protection	W
External Enhanced	E
External Enhanced Plus	R
No Internal Protection or TW*+TF*	X
Tandem/Trio TE*+TW*	Y
Tandem/Trio TE*+TF*	Z
Scalable Base	N
Scalable Smart	S
Mixed Voltage	M

## Bill of Material Product Variation

# Z R D U 1 2 M C E - T F D - 2 5 0

## Family Series

Z - Scroll  
 V - Asia Scroll  
 X - V Scroll w/other  
 Agency Approval

## Capacity Multiplier

K, L - 1,000  
 M, P, R\* - 10,000  
 C - SCFM  
 \*Additional characters for 10,000 BTUs

## Model Variation

1  
 2  
 3  
 4  
 5  
 6  
 7  
 A  
 B  
 C  
 D  
 E  
 F  
 H  
 I  
 L  
 M  
 N  
 P  
 Q  
 R  
 S  
 T  
 U  
 V  
 W  
 Z

## Motor Descriptions

Phase	Code
1	P
3	T
BPM	B
3 PWS 50/50	F
3 Encapsulated	
Stator	K
Multiple Speed	M
6 Lead Across	
The Line	D
Unlike Motor Protection	X

## Application Range/Envelope

Code	Application	Refrigerant/Substance Compressed
P	AC	R410A/B
R	AC	R134a,22,407C,450A,513A
B	Ref MT / HT	R134a,22,290,404A,407A/C/F,410A,448A,449A,507,513A
F	Ref LT / MT	R134a,22,404A,407A/C/F,410A,448A,449A,452A,507
S	Ref EM	R134a,22,404A,407A/C/F,410A,448A,449A,452A,507,513A
C	Cryogenic	Helium
M	Marine	R134a/404A /513A
N	Gas Boost	Natural Gas
X	Asia Cond Unit	R134a,22,404A,407A/C/F,448A,449A,507
T	Mobile Scroll	R134a
H	Heat Pump Optimized	R134a,407C,410A
O	Ref Subcritical LT	R744
I	Ice Market	R404A,448A,449A
E	AC	R32
J	Tropical	R410A
D	Data Center	R410A

## Typical Electrical Codes

60 Hz.	50 Hz.	Code
115-1	----	A
230-1	----	B
208-230-3	200-3	C
460-3	380-420-3	D
575-3	----	E
265-1	220-240-1	J
----	380-420-3	M
----	380-3	P
265-1	----	Q
----	220-240-3	R
----	220-1	S
208-230-1	200-1*	V
----	200-220-3	W
Misc AC Voltages	----	X
----	220-240-1	Z
200-230-3	200-220-3	5
380-3/380-400-3	----	7
----	415-3	0
220-1	220-1	3
440-1	----	4

\*Model Specific



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 General Spec

# VARIABLE SPEED COMPRESSOR NOMENCLATURE

## Modulation

V – Variable Speed  
 W – Variable Speed EVI  
Optional 2<sup>nd</sup> Position  
 VT – Even Tandem (Variable & Fixed Speed Even)  
 VU – Uneven Tandem (Variable & Fixed Speed Uneven)  
 VY – Trio (Internal Reference Only)  
 VV – Variable Speed & Variable Speed Even Tandem  
 VH – Variable Speed Horizontal  
 WT – Even Tandem (Variable EVI & Fixed Speed Even)  
 WU – Uneven Tandem (Variable EVI & Fixed Speed Uneven)

## Model Variation

1  
2  
A  
B  
C  
D  
H  
L  
Q  
S  
T

## Motor Types

### Code

1  
2  
3  
4  
5  
7  
9

## Misc. Protection

<u>Type</u>	<u>Code</u>
Enhanced External Protection	E
No Motor Protection	X
Mixed Voltage	M

## Family Series

Z – Scroll  
 V – Asia Scroll  
 X – V Scroll w/other Agency Approval  
 J- High Side Scroll

**Cubic Centimeters  
Per Revolution**  
 3 numeric characters

## Optional

E – POE Oil  
 P – POE R410A  
 U – POE R290  
 C – PVE

## Typical Electrical Codes

	<u>Code</u>
Misc DC voltage	9

**Z P V T 0 3 8 1 E – 1 E 9 – X X X**

## 1<sup>st</sup> Generation VS Only (K1)

<u>Nominal Capacity at Rating Condition</u>	<u>Capacity Multiplier</u>
2-3 numeric characters	K-1,000

## Tandem Motor Description

<u>VS</u>	<u>Fixed</u>	<u>Code</u>
2*9	T*D	2MD
3*9	T*7	3M7
4*9	T*5	4M5
4*9	T*7	4M7
4*9	T*D	4MD
5*9	T*E	5ME
5*9	T*5	5M5
7*9	T*D	7MD
7*9	T*E	7ME

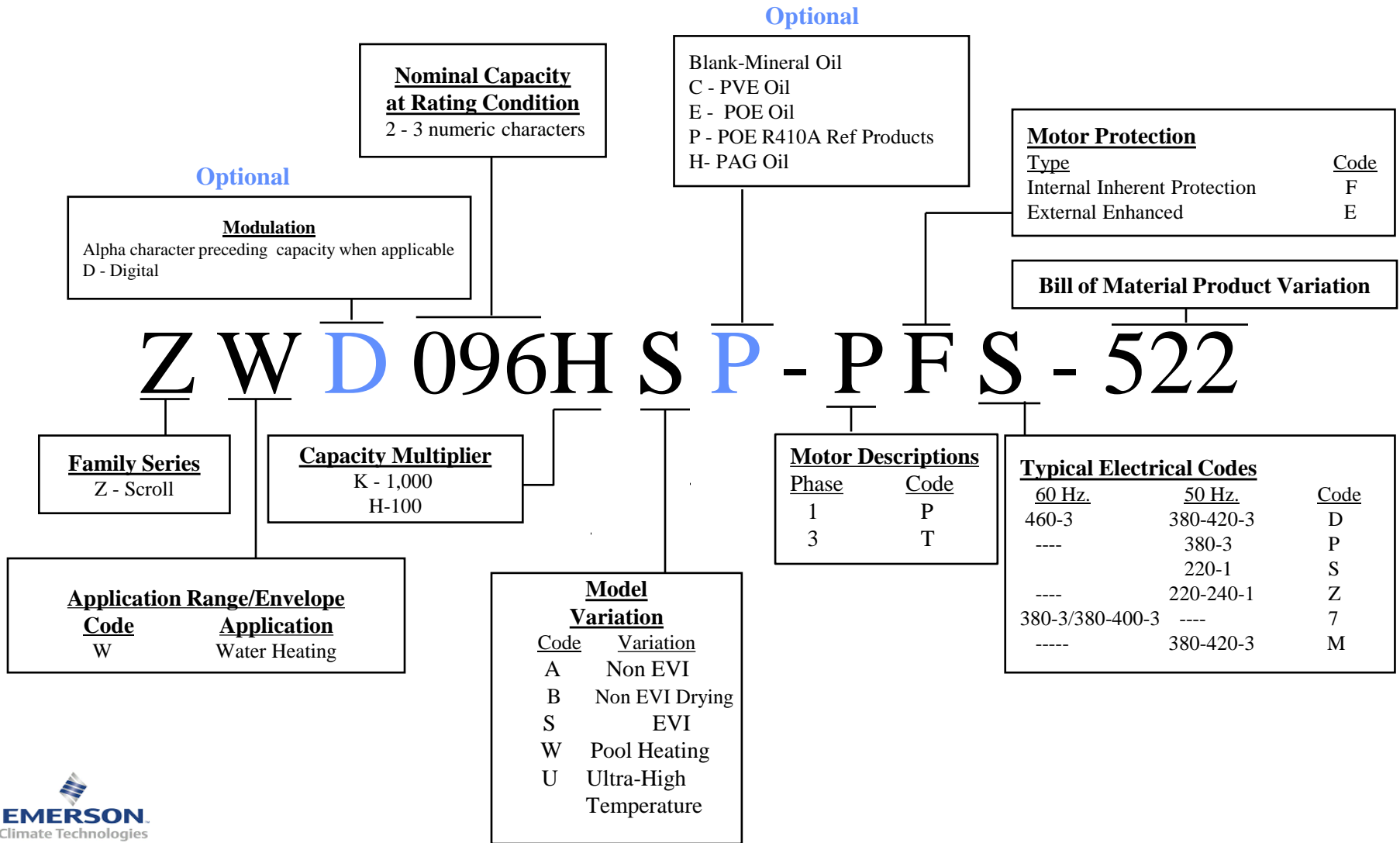
## Bill of Material Product Variation

## Application Range

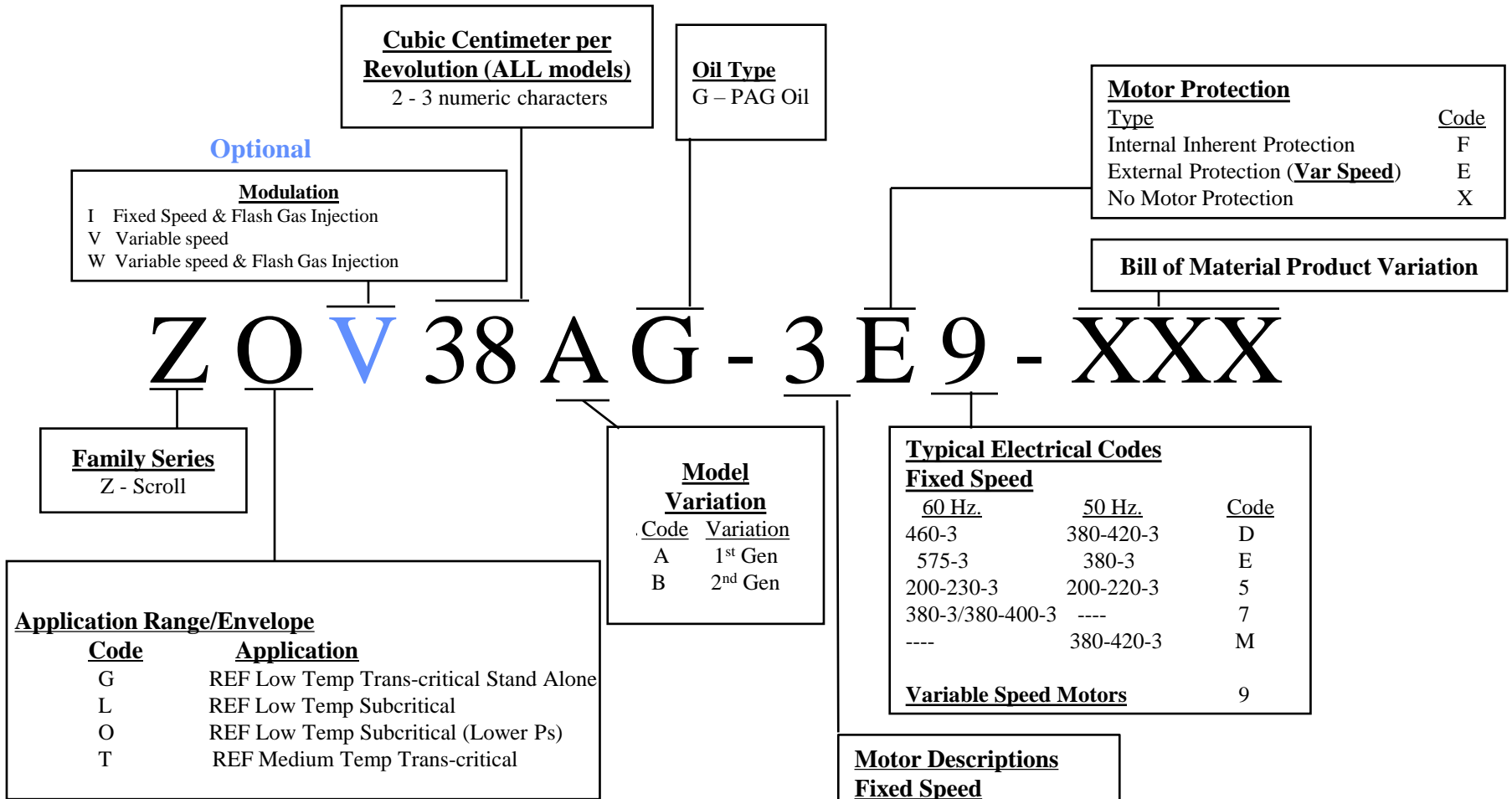
<u>Code</u>	<u>Application</u>	<u>Refgn/Substance Compressed</u>
P	AC/HP	R410A/B
H	Heat Pump Optimized	R410A, R290
B	Ref MT/HT	R290, R404A, R448A, R449A, R407A, R407C
S	Ref EM	R448A
F	Ref LT/MT	R404A, R448A, R449A, R452A
W	Water Heating Optimized	R410A
R	AC	R134A, R407C
X	Asia Cond Unit MT/HT	R404A, R448A, R449A
K	Asia Cond Unit LT/MT	R404A, R448A, R449A
D	Data Center	R410A



# ASIA WATER HEATING SCROLL NOMENCLATURE



# CO2 NEXT GEN SCROLL NOMENCLATURE



**Cubic Centimeter per Revolution (ALL models)**  
2 - 3 numeric characters

**Oil Type**  
G – PAG Oil

**Motor Protection**

Type	Code
Internal Inherent Protection	F
External Protection ( <b>Var Speed</b> )	E
No Motor Protection	X

**Optional**

**Modulation**

I Fixed Speed & Flash Gas Injection  
V Variable speed  
W Variable speed & Flash Gas Injection

**Bill of Material Product Variation**

**Z O V 38 A G - 3 E 9 - XXX**

**Family Series**  
Z - Scroll

**Model Variation**

Code	Variation
A	1 <sup>st</sup> Gen
B	2 <sup>nd</sup> Gen

**Application Range/Envelope**

Code	Application
G	REF Low Temp Trans-critical Stand Alone
L	REF Low Temp Subcritical
O	REF Low Temp Subcritical (Lower Ps)
T	REF Medium Temp Trans-critical

**Typical Electrical Codes**

**Fixed Speed**

60 Hz.	50 Hz.	Code
460-3	380-420-3	D
575-3	380-3	E
200-230-3	200-220-3	5
380-3/380-400-3	----	7
----	380-420-3	M

**Variable Speed Motors** 9

**Motor Descriptions**

**Fixed Speed**

Code	Phase
P	1
T	3

**Variable Speed Motors**

3  
4  
9



**Optional**

**Modulation**

Alpha character preceding capacity when applicable  
 D - Digital  
 H - Horizontal  
 I - Fixed Speed Vapor Injection  
 J - Digital Vapor Injection  
 S - Two Stage  
 T - Even Tandem  
 U - Uneven Tandem  
 DD - Digital/Digital Even Tandem  
 DT - Digital/Fixed Even Tandem  
 DU - Digital/Fixed Uneven Tandem  
 Y - Even Trio  
 M - Uneven Trio  
 Q - Even Quattro  
 C - Uneven Quattro

# A2L/A3 SCROLL NOMENCLATURE (INCL REF)

**Optional**

**Nominal Capacity at Rating**

2-3 numeric characters  
 K=1,000  
 M=10,000  
 C=SCFM  
 Capacity Reference depends on application (R32 for P, R454C for other models)\*

E - POE Oil - 3MAF  
 G - PAG Oil  
 P - POE Oil 3MAF High Pressure  
 U - POE R290  
 V - POE Oil for A2L (Medium Pressure/REF)  
 T - VG46 POE 4MA

**Motor Protection**

Type	Code
Internal Inherent Protection	F
External Electronic Protection	W
External Enhanced	E
Tandem/Trio TE*+TW*	Y
Tandem/Trio TE*+TF*	Z
Scalable Base	N
Scalable Smart	S
Mixed Voltage	M

**Bill of Material Product Variation Alpha Characters only**

**Y P D U 123K Z T - T N D - AAA**

**Family Series**

Y - Scroll A2L/A3  
 L - China Scroll A2L/A3

**Model Variation**

I  
 A  
 C  
 N  
 S  
 T  
 Z

**Motor Descriptions**

Phase	Code
1	P
3	T
BPM	B
3 PWS 50/50	F
3 Encapsulated	
Stator	K
Multiple Speed	M
6 Lead Across	
The Line	D
Unlike Motor Protection	X

**Typical Electrical Codes**

60 Hz.	50 Hz.	Code
460-3	380-420-3	D
575-3	----	E
265-1	220-240-1	J
----	380-420-3	M
208-230-1	200-1*	V
200-230-3	200-220-3	5
380-3/380-400-3	----	7

\*Model Specific

**Application Range/Envelope**

Code	Application	Refgn/Substance Compressed
A	AC (High Pressure)	R454B/R452B
P	AC (High Pressure)	R32
R	AC (Med Pressure)	R454C, R455A, R454A, R1234YF
B	Ref MT / HT	R454C, R455A, R454A, R1234YF / R290
F	Ref LT / MT	R454C, R455A, R454A / R290
H	Heat Pump Optimized	R452B, R454B, R454C, R455A / R290
S	MT Extended	R454C, R455A, R454A, R1234YF / R290
M	Marine	R1234YF
D	Data Center	R32

\*Capacity reference (A2L's):

YA: 45/130F @60Hz with R454B in Btu/h  
 YB & YS: 20/120F @60Hz with R454C in Btu/h  
 YF: -25/105F @60Hz with R454C in Btu/h  
 YH(I): -6.7/50°C @50Hz with R454C or R452B in kW  
 YR: 45/130F @60Hz with R454C in Btu/h  
 YP: 45/130F @60Hz with R32 in Btu/h



# A2L/A3 VARIABLE SPEED COMPRESSOR NOMENCLATURE

## Modulation

V – Variable Speed  
 W – Variable Speed EVI  
**Optional 2<sup>nd</sup> Position**  
 VT – Even Tandem (Variable & Fixed Speed Even)  
 VU – Uneven Tandem (Variable & Fixed Speed Uneven)  
 VY – Trio (Internal Reference Only)  
 VV – Variable Speed & Variable Speed  
 VH – Variable Speed Horizontal  
 WT – Even Tandem (Variable EVI & Fixed Speed Even)  
 WU – Uneven Tandem (Variable EVI & Fixed Speed Uneven)

## Model Variation

I  
 A  
 B  
 C  
 D  
 H  
 L  
 R  
 S

## Misc. Protection

Type	Code
Enhanced External Protection	E
No Motor Protection	X
Mixed Voltage	M

## Family Series

Y – Scroll A2L/A3  
 L – China Scroll A2L/A3

## Cubic Centimeters Per Revolution

3 numeric characters

## Optional

E – POE Oil  
 G – PAG Oil  
 P – POE 3MA (High Pressure)  
 U – POE R290  
 T – POE VG46

## Typical Electrical Codes

Code
Misc DC voltage 9

**Y P V T 0 3 8 1 T - 1 E 9 - AAA**

## Application Range

Code	Application	Refgn/Substance Compressed
A	AC/HP	R454B/R452B
P	AC/HP	R32
H	Heat Pump Optimized	R452B, R454B, R454C / R290
B	Ref MT/HT	R454C, R455A, R454A, R1234yf / R290
S	Ref EM	R290
F	Ref LT/MT	R454C, R455A, R454A / R290
D	Data Center	R32

## Motor Types

Code
1
2
3
4
5
7
9

**Bill of Material Product Variation Alpha Characters only**



# A2L/A3 ASIA WATER HEATING SCROLL NOMENCLATURE

