

# 5.1

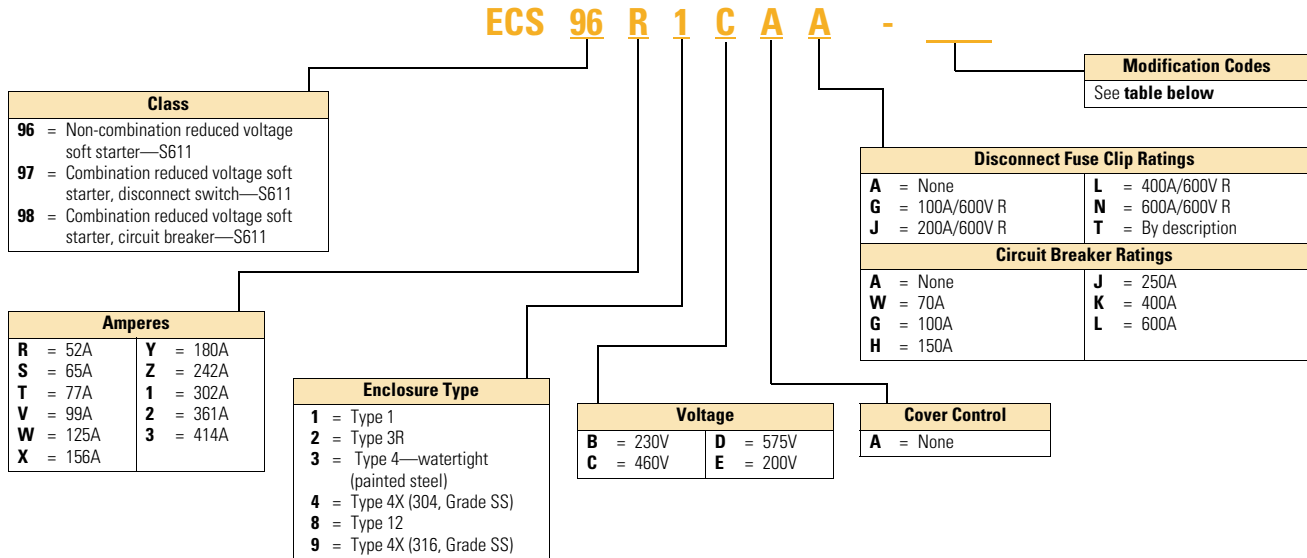
## Reduced Voltage Starter

### S611 Solid-State Soft Starter

#### Catalog Number Selection

##### S611 Solid-State Soft Starters

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#### Enclosed S611 Modification Codes

Modification Code	Description
A47	2 N.O. / 2 N.C. auxiliary relay (soft start)
C1	Standard size CPT, 120V/60 Hz, 110V 50 Hz secondary w/fuses
C42	With 50 VA extra capacity CPT, 120V/60 Hz, 110V 50 Hz secondary w/fuses
C3	With 100 VA extra capacity CPT, 120V/60 Hz, 110V 50 Hz secondary w/fuses
C5	With 200 VA extra capacity CPT, 120V/60 Hz, 110V 50 Hz secondary w/fuses
C7	With 300 VA extra capacity CPT, 120V/60 Hz, 110V 50 Hz secondary w/fuses
C8	With 400 VA extra capacity CPT, 120V/60 Hz, 110V 50 Hz secondary w/fuses
C9	With 1K VA extra capacity CPT, 120V/60 Hz, 110V 50 Hz secondary w/fuses
C10	With 2K VA extra capacity CPT, 120V/60 Hz, 110V 50 Hz secondary w/fuses
C12	2-pole 120V coil control relay
C47	Bypass starter with SSOL - S611 ONLY
P7	PB - START/STOP
P23	PL - red RUN
P25	PL - green OFF
S3	HAND-OFF-AUTO selector switch
S44	2-position selector switch
T15	Terminal point per customer specification, wired

**Note:** Door mounted keypad and pump control algorithm are provided as standard.

### Product Selection

#### Non-Combination

#### Class ECS96—Non-Combination Reduced Voltage Soft Starter—S611

Amps	Motor Voltage	hp <sup>①</sup>	Coil Voltage	Type 1 Catalog Number	Type 3R Catalog Number	Type 4X <sup>②</sup> Catalog Number	Type 12 Catalog Number	Component Soft Starter (Open) Catalog Number
<b>Frame A</b>								
52A	200V	15	120 Vac	ECS96R1EAA	ECS96R2EAA	ECS96R4EAA	ECS96R8EAA	S611A052P3S
	230V	15		ECS96R1BAA	ECS96R2BAA	ECS96R4BAA	ECS96R8BAA	
	460V	40		ECS96R1CAA	ECS96R2CAA	ECS96R4CAA	ECS96R8CAA	
	575V	50		ECS96R1DAA	ECS96R2DAA	ECS96R4DAA	ECS96R8DAA	
65A	200V	20	120 Vac	ECS96S1EAA	ECS96S2EAA	ECS96S4EAA	ECS96S8EAA	S611A065P3S
	230V	20		ECS96S1BAA	ECS96S2BAA	ECS96S4BAA	ECS96S8BAA	
	460V	50		ECS96S1CAA	ECS96S2CAA	ECS96S4CAA	ECS96S8CAA	
	575V	60		ECS96S1DAA	ECS96S2DAA	ECS96S4DAA	ECS96S8DAA	
77A	200V	25	120 Vac	ECS96T1EAA	ECS96T2EAA	ECS96T4EAA	ECS96T8EAA	S611A077P3S
	230V	25		ECS96T1BAA	ECS96T2BAA	ECS96T4BAA	ECS96T8BAA	
	460V	60		ECS96T1CAA	ECS96T2CAA	ECS96T4CAA	ECS96T8CAA	
	575V	75		ECS96T1DAA	ECS96T2DAA	ECS96T4DAA	ECS96T8DAA	
<b>Frame B</b>								
99A	200V	30	120 Vac	ECS96V1EAA	ECS96V2EAA	ECS96V4EAA	ECS96V8EAA	S611B099P3S
	230V	30		ECS96V1BAA	ECS96V2BAA	ECS96V4BAA	ECS96V8BAA	
	460V	75		ECS96V1CAA	ECS96V2CAA	ECS96V4CAA	ECS96V8CAA	
	575V	100		ECS96V1DAA	ECS96V2DAA	ECS96V4DAA	ECS96V8DAA	
125A	200V	40	120 Vac	ECS96W1EAA	ECS96W2EAA	ECS96W4EAA	ECS96W8EAA	S611B125P3S
	230V	40		ECS96W1BAA	ECS96W2BAA	ECS96W4BAA	ECS96W8BAA	
	460V	100		ECS96W1CAA	ECS96W2CAA	ECS96W4CAA	ECS96W8CAA	
	575V	125		ECS96W1DAA	ECS96W2DAA	ECS96W4DAA	ECS96W8DAA	
<b>Frame C</b>								
156A	200V	50	120 Vac	ECS96X1EAA	ECS96X2EAA	ECS96X4EAA	ECS96X8EAA	S611C156P3S
	230V	60		ECS96X1BAA	ECS96X2BAA	ECS96X4BAA	ECS96X8BAA	
	460V	125		ECS96X1CAA	ECS96X2CAA	ECS96X4CAA	ECS96X8CAA	
	575V	150		ECS96X1DAA	ECS96X2DAA	ECS96X4DAA	ECS96X8DAA	
180A	200V	60	120 Vac	ECS96Y1EAA	ECS96Y2EAA	ECS96Y4EAA	ECS96Y8EAA	S611C180P3S
	230V	60		ECS96Y1BAA	ECS96Y2BAA	ECS96Y4BAA	ECS96Y8BAA	
	460V	150		ECS96Y1CAA	ECS96Y2CAA	ECS96Y4CAA	ECS96Y8CAA	
	575V	150		ECS96Y1DAA	ECS96Y2DAA	ECS96Y4DAA	ECS96Y8DAA	

#### Notes

- ① Standard duty horsepower ratings are for 300% ramp current, 15 seconds ramp time, and 115% continuous. Consult Eaton for other ratings.
- ② The catalog numbers listed in the Type 4X column are for Type 4X 304-Grade stainless steel, as indicated by the **seventh** digit. Example: ECS96R4EAA. To order Type 4X 316-Grade stainless steel, change that digit to **9**. To order Type 4 painted steel, change that digit to **3**. To order non-metallic, change that digit to **5**. For details on these alternate enclosures, see **Tab 12**.

# 5.1

## Reduced Voltage Starter

### S611 Solid-State Soft Starter

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#### Class ECS96—Non-Combination Reduced Voltage Soft Starter—S611, continued

Amps	Motor Voltage	hp <sup>①</sup>	Coil Voltage	Type 1 Catalog Number	Type 3R Catalog Number	Type 4X <sup>②</sup> Catalog Number	Type 12 Catalog Number	Component Soft Starter (Open) Catalog Number
<b>Frame D</b>								
242A	200V	75	120 Vac	ECS96Z1EAA	ECS96Z2EAA	ECS96Z4EAA	ECS96Z8EAA	S611D242P3S
	230V	75		ECS96Z1BAA	ECS96Z2BAA	ECS96Z4BAA	ECS96Z8BAA	
	460V	200		ECS96Z1CAA	ECS96Z2CAA	ECS96Z4CAA	ECS96Z8CAA	
	575V	250		ECS96Z1DAA	ECS96Z2DAA	ECS96Z4DAA	ECS96Z8DAA	
<b>Frame E</b>								
302A	200V	100	120 Vac	ECS9611EAA	ECS9612EAA	ECS9614EAA	ECS9618EAA	S611E302P3S
	230V	100		ECS9611BAA	ECS9612BAA	ECS9614BAA	ECS9618BAA	
	460V	250		ECS9611CAA	ECS9612CAA	ECS9614CAA	ECS9618CAA	
	575V	300		ECS9611DAA	ECS9612DAA	ECS9614DAA	ECS9618DAA	
361A	200V	125	120 Vac	ECS9621EAA	ECS9622EAA	ECS9624EAA	ECS9628EAA	S611E361P3S
	230V	150		ECS9621BAA	ECS9622BAA	ECS9624BAA	ECS9628BAA	
	460V	300		ECS9621CAA	ECS9622CAA	ECS9624CAA	ECS9628CAA	
	575V	350		ECS9621DAA	ECS9622DAA	ECS9624DAA	ECS9628DAA	
<b>Frame F</b>								
414A	200V	150	120 Vac	ECS9631EAA	ECS9632EAA	ECS9634EAA	ECS9638EAA	S611F414P3S
	230V	150		ECS9631BAA	ECS9632BAA	ECS9634BAA	ECS9638BAA	
	460V	350		ECS9631CAA	ECS9632CAA	ECS9634CAA	ECS9638CAA	
	575V	450		ECS9631DAA	ECS9632DAA	ECS9634DAA	ECS9638DAA	

#### Notes

- ① Standard duty horsepower ratings are for 300% ramp current, 15 seconds ramp time, and 115% continuous. Consult Eaton for other ratings.
- ② The catalog numbers listed in the Type 4X column are for Type 4X 304-Grade stainless steel, as indicated by the **seventh** digit. Example: ECS96Z4EAA. To order Type 4X 316-Grade stainless steel, change that digit to **9**. To order Type 4 painted steel, change that digit to **3**. To order non-metallic, change that digit to **5**. For details on these alternate enclosures, see **Tab 12**.

### Combination—Disconnect Switch

#### Class ECS97—Combination Reduced Voltage Soft Starter—Disconnect Switch (Non-Fusible)—S611

Amps	Motor Voltage	hp <sup>①</sup>	Coil Voltage	Type 1 Catalog Number	Type 3R Catalog Number	Type 4X <sup>②</sup> Catalog Number	Type 12 Catalog Number	Component Soft Starter (Open) Catalog Number
<b>Frame A</b>								
52A	200V	15	120 Vac	ECS97R1EAA	ECS97R2EAA	ECS97R4EAA	ECS97R8EAA	S611A052P3S
	230V	15		ECS97R1BAA	ECS97R2BAA	ECS97R4BAA	ECS97R8BAA	
	460V	40		ECS97R1CAA	ECS97R2CAA	ECS97R4CAA	ECS97R8CAA	
	575V	50		ECS97R1DAA	ECS97R2DAA	ECS97R4DAA	ECS97R8DAA	
65A	200V	20	120 Vac	ECS97S1EAA	ECS97S2EAA	ECS97S4EAA	ECS97S8EAA	S611A065P3S
	230V	20		ECS97S1BAA	ECS97S2BAA	ECS97S4BAA	ECS97S8BAA	
	460V	50		ECS97S1CAA	ECS97S2CAA	ECS97S4CAA	ECS97S8CAA	
	575V	60		ECS97S1DAA	ECS97S2DAA	ECS97S4DAA	ECS97S8DAA	
77A	200V	25	120 Vac	ECS97T1EAA	ECS97T2EAA	ECS97T4EAA	ECS97T8EAA	S611A077P3S
	230V	25		ECS97T1BAA	ECS97T2BAA	ECS97T4BAA	ECS97T8BAA	
	460V	60		ECS97T1CAA	ECS97T2CAA	ECS97T4CAA	ECS97T8CAA	
	575V	75		ECS97T1DAA	ECS97T2DAA	ECS97T4DAA	ECS97T8DAA	
<b>Frame B</b>								
99A	200V	30	120 Vac	ECS97V1EAA	ECS97V2EAA	ECS97V4EAA	ECS97V8EAA	S611B099P3S
	230V	30		ECS97V1BAA	ECS97V2BAA	ECS97V4BAA	ECS97V8BAA	
	460V	75		ECS97V1CAA	ECS97V2CAA	ECS97V4CAA	ECS97V8CAA	
	575V	100		ECS97V1DAA	ECS97V2DAA	ECS97V4DAA	ECS97V8DAA	
125A	200V	40	120 Vac	ECS97W1EAA	ECS97W2EAA	ECS97W4EAA	ECS97W8EAA	S611B125P3S
	230V	40		ECS97W1BAA	ECS97W2BAA	ECS97W4BAA	ECS97W8BAA	
	460V	100		ECS97W1CAA	ECS97W2CAA	ECS97W4CAA	ECS97W8CAA	
	575V	125		ECS97W1DAA	ECS97W2DAA	ECS97W4DAA	ECS97W8DAA	
<b>Frame C</b>								
156A	200V	50	120 Vac	ECS97X1EAA	ECS97X2EAA	ECS97X4EAA	ECS97X8EAA	S611C156P3S
	230V	60		ECS97X1BAA	ECS97X2BAA	ECS97X4BAA	ECS97X8BAA	
	460V	125		ECS97X1CAA	ECS97X2CAA	ECS97X4CAA	ECS97X8CAA	
	575V	150		ECS97X1DAA	ECS97X2DAA	ECS97X4DAA	ECS97X8DAA	
180A	200V	60	120 Vac	ECS97Y1EAA	ECS97Y2EAA	ECS97Y4EAA	ECS97Y8EAA	S611C180P3S
	230V	60		ECS97Y1BAA	ECS97Y2BAA	ECS97Y4BAA	ECS97Y8BAA	
	460V	150		ECS97Y1CAA	ECS97Y2CAA	ECS97Y4CAA	ECS97Y8CAA	
	575V	150		ECS97Y1DAA	ECS97Y2DAA	ECS97Y4DAA	ECS97Y8DAA	

**Notes**

- ① Standard duty horsepower ratings are for 300% ramp current, 15 seconds ramp time, and 115% continuous. Consult Eaton for other ratings.
- ② The catalog numbers listed in the Type 4X column are for Type 4X 304-Grade stainless steel, as indicated by the **seventh** digit. Example: ECS97R4EAA. To order Type 4X 316-Grade stainless steel, change that digit to **9**. To order Type 4 painted steel, change that digit to **3**. To order non-metallic, change that digit to **5**. For details on these alternate enclosures, see **Tab 12**.

# 5.1

## Reduced Voltage Starter

### S611 Solid-State Soft Starter

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#### Class ECS97—Combination Reduced Voltage Soft Starter—Disconnect Switch (Non-Fusible)—S611, continued

Amps	Motor Voltage	hp <sup>①</sup>	Coil Voltage	Type 1 Catalog Number	Type 3R Catalog Number	Type 4X <sup>②</sup> Catalog Number	Type 12 Catalog Number	Component Soft Starter (Open) Catalog Number
<b>Frame D</b>								
242A	200V	75	120 Vac	ECS9721EAA	ECS9722EAA	ECS9724EAA	ECS9728EAA	S611D242P3S
	230V	75		ECS9721BAA	ECS9722BAA	ECS9724BAA	ECS9728BAA	
	460V	200		ECS9721CAA	ECS9722CAA	ECS9724CAA	ECS9728CAA	
	575V	250		ECS9721DAA	ECS9722DAA	ECS9724DAA	ECS9728DAA	
<b>Frame E</b>								
302A	200V	100	120 Vac	ECS9711EAA	ECS9712EAA	ECS9714EAA	ECS9718EAA	S611E302P3S
	230V	100		ECS9711BAA	ECS9712BAA	ECS9714BAA	ECS9718BAA	
	460V	250		ECS9711CAA	ECS9712CAA	ECS9714CAA	ECS9718CAA	
	575V	300		ECS9711DAA	ECS9712DAA	ECS9714DAA	ECS9718DAA	
361A	200V	125	120 Vac	ECS9721EAA	ECS9722EAA	ECS9724EAA	ECS9728EAA	S611E361P3S
	230V	150		ECS9721BAA	ECS9722BAA	ECS9724BAA	ECS9728BAA	
	460V	300		ECS9721CAA	ECS9722CAA	ECS9724CAA	ECS9728CAA	
	575V	350		ECS9721DAA	ECS9722DAA	ECS9724DAA	ECS9728DAA	
<b>Frame F</b>								
414A	200V	150	120 Vac	ECS9731EAA	ECS9732EAA	ECS9734EAA	ECS9738EAA	S611F414P3S
	230V	150		ECS9731BAA	ECS9732BAA	ECS9734BAA	ECS9738BAA	
	460V	350		ECS9731CAA	ECS9732CAA	ECS9734CAA	ECS9738CAA	
	575V	450		ECS9731DAA	ECS9732DAA	ECS9734DAA	ECS9738DAA	

#### Notes

- ① Standard duty horsepower ratings are for 300% ramp current, 15 seconds ramp time, and 115% continuous. Consult Eaton for other ratings.
- ② The catalog numbers listed in the Type 4X column are for Type 4X 304-Grade stainless steel, as indicated by the **seventh** digit. Example: ECS9724EAA. To order Type 4X 316-Grade stainless steel, change that digit to **9**. To order Type 4 painted steel, change that digit to **3**. To order non-metallic, change that digit to **5**. For details on these alternate enclosures, see **Tab 12**.

### Class ECS97—Combination Reduced Voltage Soft Starter—Disconnect Switch (Fusible)—S611

Amps	Motor Voltage	hp <sup>①</sup>	Coil Voltage	Type 1 Catalog Number	Type 3R Catalog Number	Type 4X <sup>②</sup> Catalog Number	Type 12 Catalog Number	Component Soft Starter (Open) Catalog Number
<b>Frame A</b>								
52A	200V	15	120 Vac	ECS97R1EAG	ECS97R2EAG	ECS97R4EAG	ECS97R8EAG	S611A052P3S
	230V	15		ECS97R1BAG	ECS97R2BAG	ECS97R4BAG	ECS97R8BAG	
	460V	40		ECS97R1CAG	ECS97R2CAG	ECS97R4CAG	ECS97R8CAG	
	575V	50		ECS97R1DAG	ECS97R2DAG	ECS97R4DAG	ECS97R8DAG	
65A	200V	20	120 Vac	ECS97S1EAG	ECS97S2EAG	ECS97S4EAG	ECS97S8EAG	S611A065P3S
	230V	20		ECS97S1BAG	ECS97S2BAG	ECS97S4BAG	ECS97S8BAG	
	460V	50		ECS97S1CAG	ECS97S2CAG	ECS97S4CAG	ECS97S8CAG	
	575V	60		ECS97S1DAG	ECS97S2DAG	ECS97S4DAG	ECS97S8DAG	
77A	200V	25	120 Vac	ECS97T1EAG	ECS97T2EAG	ECS97T4EAG	ECS97T8EAG	S611A077P3S
	230V	25		ECS97T1BAG	ECS97T2BAG	ECS97T4BAG	ECS97T8BAG	
	460V	60		ECS97T1CAG	ECS97T2CAG	ECS97T4CAG	ECS97T8CAG	
	575V	75		ECS97T1DAG	ECS97T2DAG	ECS97T4DAG	ECS97T8DAG	
<b>Frame B</b>								
99A	200V	30	120 Vac	ECS97V1EAJ	ECS97V2EAJ	ECS97V4EAJ	ECS97V8EAJ	S611B099P3S
	230V	30		ECS97V1BAJ	ECS97V2BAJ	ECS97V4BAJ	ECS97V8BAJ	
	460V	75		ECS97V1CAJ	ECS97V2CAJ	ECS97V4CAJ	ECS97V8CAJ	
	575V	100		ECS97V1DAJ	ECS97V2DAJ	ECS97V4DAJ	ECS97V8DAJ	
125A	200V	40	120 Vac	ECS97W1EAJ	ECS97W2EAJ	ECS97W4EAJ	ECS97W8EAJ	S611B125P3S
	230V	40		ECS97W1BAJ	ECS97W2BAJ	ECS97W4BAJ	ECS97W8BAJ	
	460V	100		ECS97W1CAJ	ECS97W2CAJ	ECS97W4CAJ	ECS97W8CAJ	
	575V	125		ECS97W1DAJ	ECS97W2DAJ	ECS97W4DAJ	ECS97W8DAJ	
<b>Frame C</b>								
156A	200V	50	120 Vac	ECS97X1EAL	ECS97X2EAL	ECS97X4EAL	ECS97X8EAL	S611C156P3S
	230V	60		ECS97X1BAL	ECS97X2BAL	ECS97X4BAL	ECS97X8BAL	
	460V	125		ECS97X1CAL	ECS97X2CAL	ECS97X4CAL	ECS97X8CAL	
	575V	150		ECS97X1DAL	ECS97X2DAL	ECS97X4DAL	ECS97X8DAL	
180A	200V	60	120 Vac	ECS97Y1EAL	ECS97Y2EAL	ECS97Y4EAL	ECS97Y8EAL	S611C180P3S
	230V	60		ECS97Y1BAL	ECS97Y2BAL	ECS97Y4BAL	ECS97Y8BAL	
	460V	150		ECS97Y1CAL	ECS97Y2CAL	ECS97Y4CAL	ECS97Y8CAL	
	575V	150		ECS97Y1DAL	ECS97Y2DAL	ECS97Y4DAL	ECS97Y8DAL	

#### Notes

- ① Standard duty horsepower ratings are for 300% ramp current, 15 seconds ramp time, and 115% continuous. Consult Eaton for other ratings.
- ② The catalog numbers listed in the Type 4X column are for Type 4X 304-Grade stainless steel, as indicated by the **seventh** digit. Example: ECS97R4EAA. To order Type 4X 316-Grade stainless steel, change that digit to **9**. To order Type 4 painted steel, change that digit to **3**. To order non-metallic, change that digit to **5**. For details on these alternate enclosures, see **Tab 12**.

# 5.1

## Reduced Voltage Starter

### S611 Solid-State Soft Starter

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#### Class ECS97—Combination Reduced Voltage Soft Starter—Disconnect Switch (Fusible)—S611, continued

Amps	Motor Voltage	hp <sup>①</sup>	Coil Voltage	Type 1 Catalog Number	Type 3R Catalog Number	Type 4X <sup>②</sup> Catalog Number	Type 12 Catalog Number	Component Soft Starter (Open) Catalog Number
<b>Frame D</b>								
242A	200V	75	120 Vac	ECS9721EAL	ECS9722EAL	ECS9724EAL	ECS9728EAL	S611D242P3S
	230V	75		ECS9721BAL	ECS9722BAL	ECS9724BAL	ECS9728BAL	
	460V	200		ECS9721CAL	ECS9722CAL	ECS9724CAL	ECS9728CAL	
	575V	250		ECS9721DAL	ECS9722DAL	ECS9724DAL	ECS9728DAL	
<b>Frame E</b>								
302A	200V	100	120 Vac	ECS9711EAN	ECS9712EAN	ECS9714EAN	ECS9718EAN	S611E302P3S
	230V	100		ECS9711BAN	ECS9712BAN	ECS9714BAN	ECS9718BAN	
	460V	250		ECS9711CAN	ECS9712CAN	ECS9714CAN	ECS9718CAN	
	575V	300		ECS9711DAN	ECS9712DAN	ECS9714DAN	ECS9718DAN	
361A	200V	125	120 Vac	ECS9721EAN	ECS9722EAN	ECS9724EAN	ECS9728EAN	S611E361P3S
	230V	150		ECS9721BAN	ECS9722BAN	ECS9724BAN	ECS9728BAN	
	460V	300		ECS9721CAN	ECS9722CAN	ECS9724CAN	ECS9728CAN	
	575V	350		ECS9721DAN	ECS9722DAN	ECS9724DAN	ECS9728DAN	
<b>Frame F</b>								
414A	200V	150	120 Vac	ECS9731EAN	ECS9732EAN	ECS9734EAN	ECS9738EAN	S611F414P3S
	230V	150		ECS9731BAN	ECS9732BAN	ECS9734BAN	ECS9738BAN	
	460V	350		ECS9731CAN	ECS9732CAN	ECS9734CAN	ECS9738CAN	
	575V	450		ECS9731DAN	ECS9732DAN	ECS9734DAN	ECS9738DAN	

#### Notes

- ① Standard duty horsepower ratings are for 300% ramp current, 15 seconds ramp time, and 115% continuous. Consult Eaton for other ratings.
- ② The catalog numbers listed in the Type 4X column are for Type 4X 304-Grade stainless steel, as indicated by the **seventh** digit. Example: ECS9724EAA. To order Type 4X 316-Grade stainless steel, change that digit to **9**. To order Type 4 painted steel, change that digit to **3**. To order non-metallic, change that digit to **5**. For details on these alternate enclosures, see **Tab 12**.

### Combination—Circuit Breaker

#### Class ECS98—Combination Reduced Voltage Soft Starter—Circuit Breaker—S611

Amps	Motor Voltage	hp <sup>①</sup>	Coil Voltage	Type 1 Catalog Number	Type 3R Catalog Number	Type 4X <sup>②</sup> Catalog Number	Type 12 Catalog Number	Component Soft Starter (Open) Catalog Number
<b>Frame A</b>								
52A	200V	15	120 Vac	ECS98R1EAW	ECS98R2EAW	ECS98R4EAW	ECS98R8EAW	S611A052P3S
	230V	15		ECS98R1BAW	ECS98R2BAW	ECS98R4BAW	ECS98R8BAW	
	460V	40		ECS98R1CAW	ECS98R2CAW	ECS98R4CAW	ECS98R8CAW	
	575V	50		ECS98R1DAW	ECS98R2DAW	ECS98R4DAW	ECS98R8DAW	
65A	200V	20	120 Vac	ECS98S1EAG	ECS98S2EAG	ECS98S4EAG	ECS98S8EAG	S611A065P3S
	230V	20		ECS98S1BAG	ECS98S2BAG	ECS98S4BAG	ECS98S8BAG	
	460V	50		ECS98S1CAG	ECS98S2CAG	ECS98S4CAG	ECS98S8CAG	
	575V	60		ECS98S1DAG	ECS98S2DAG	ECS98S4DAG	ECS98S8DAG	
77A	200V	25	120 Vac	ECS98T1EAG	ECS98T2EAG	ECS98T4EAG	ECS98T8EAG	S611A077P3S
	230V	25		ECS98T1BAG	ECS98T2BAG	ECS98T4BAG	ECS98T8BAG	
	460V	60		ECS98T1CAG	ECS98T2CAG	ECS98T4CAG	ECS98T8CAG	
	575V	75		ECS98T1DAG	ECS98T2DAG	ECS98T4DAG	ECS98T8DAG	
<b>Frame B</b>								
99A	200V	30	120 Vac	ECS98V1EAH	ECS98V2EAH	ECS98V4EAH	ECS98V8EAH	S611B099P3S
	230V	30		ECS98V1BAH	ECS98V2BAH	ECS98V4BAH	ECS98V8BAH	
	460V	75		ECS98V1CAH	ECS98V2CAH	ECS98V4CAH	ECS98V8CAH	
	575V	100		ECS98V1DAH	ECS98V2DAH	ECS98V4DAH	ECS98V8DAH	
125A	200V	40	120 Vac	ECS98W1EAH	ECS98W2EAH	ECS98W4EAH	ECS98W8EAH	S611B125P3S
	230V	40		ECS98W1BAH	ECS98W2BAH	ECS98W4BAH	ECS98W8BAH	
	460V	100		ECS98W1CAH	ECS98W2CAH	ECS98W4CAH	ECS98W8CAH	
	575V	125		ECS98W1DAH	ECS98W2DAH	ECS98W4DAH	ECS98W8DAH	
<b>Frame C</b>								
156A	200V	50	120 Vac	ECS98X1EAJ	ECS98X2EAJ	ECS98X4EAJ	ECS98X8EAJ	S611C156P3S
	230V	60		ECS98X1BAJ	ECS98X2BAJ	ECS98X4BAJ	ECS98X8BAJ	
	460V	125		ECS98X1CAJ	ECS98X2CAJ	ECS98X4CAJ	ECS98X8CAJ	
	575V	150		ECS98X1DAJ	ECS98X2DAJ	ECS98X4DAJ	ECS98X8DAJ	
180A	200V	60	120 Vac	ECS98Y1EAJ	ECS98Y2EAJ	ECS98Y4EAJ	ECS98Y8EAJ	S611C180P3S
	230V	60		ECS98Y1BAJ	ECS98Y2BAJ	ECS98Y4BAJ	ECS98Y8BAJ	
	460V	150		ECS98Y1CAJ	ECS98Y2CAJ	ECS98Y4CAJ	ECS98Y8CAJ	
	575V	150		ECS98Y1DAJ	ECS98Y2DAJ	ECS98Y4DAJ	ECS98Y8DAJ	

#### Notes

- ① Standard duty horsepower ratings are for 300% ramp current, 15 seconds ramp time, and 115% continuous. Consult Eaton for other ratings.
- ② The catalog numbers listed in the Type 4X column are for Type 4X 304-Grade stainless steel, as indicated by the **seventh** digit. Example: ECS98R4EAA. To order Type 4X 316-Grade stainless steel, change that digit to **9**. To order Type 4 painted steel, change that digit to **3**. To order non-metallic, change that digit to **5**. For details on these alternate enclosures, see **Tab 12**.



# 5.1

## Reduced Voltage Starter

### S611 Solid-State Soft Starter

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#### Class ECS98—Combination Reduced Voltage Soft Starter—Circuit Breaker—S611, continued

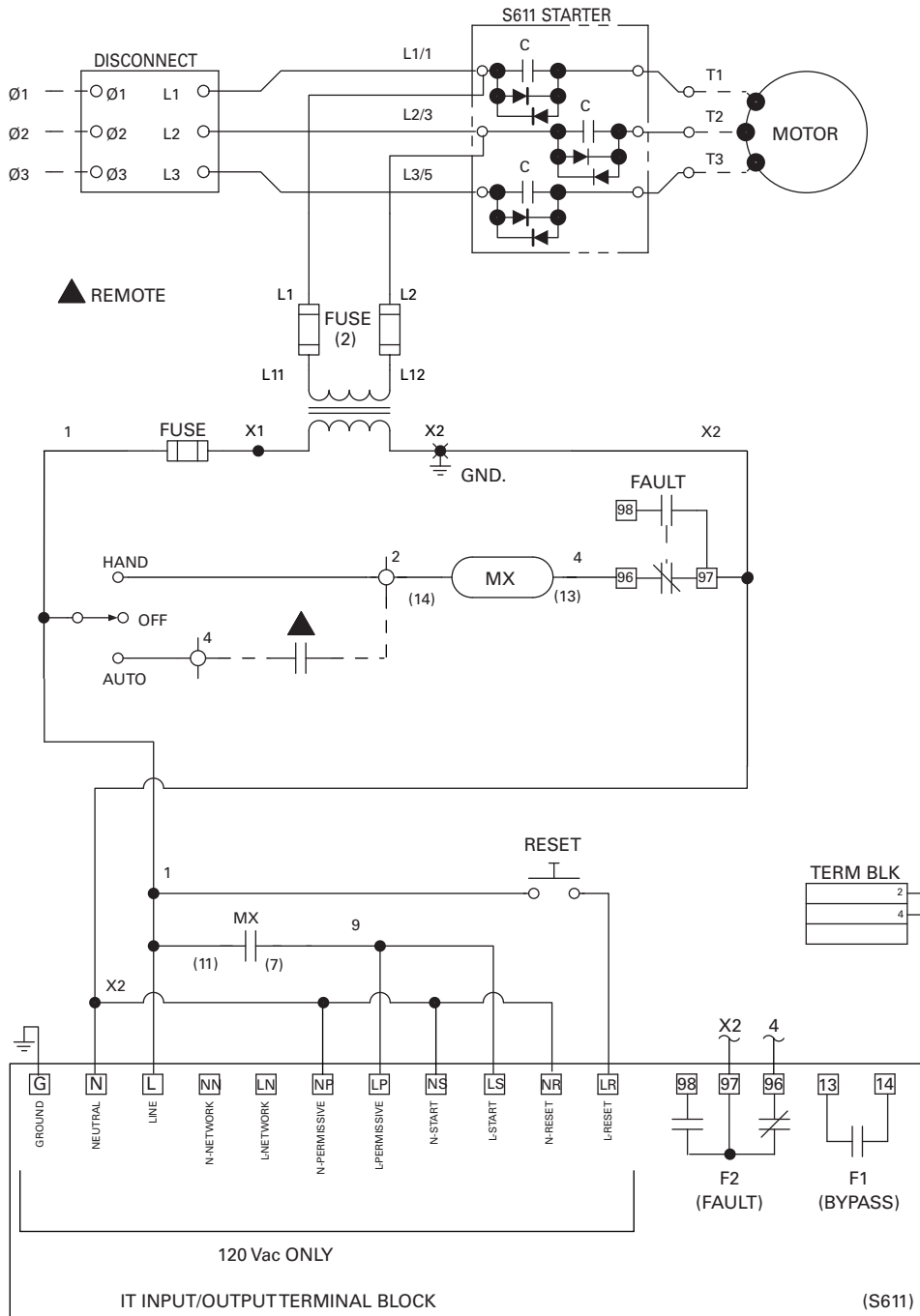
Amps	Motor Voltage	hp <sup>①</sup>	Coil Voltage	Type 1 Catalog Number	Type 3R Catalog Number	Type 4X <sup>②</sup> Catalog Number	Type 12 Catalog Number	Component Soft Starter (Open) Catalog Number
<b>Frame D</b>								
242A	200V	75	120 Vac	ECS98Z1EAK	ECS98Z2EAK	ECS98Z4EAK	ECS98Z8EAK	S611D242P3S
	230V	75		ECS98Z1BAK	ECS98Z2BAK	ECS98Z4BAK	ECS98Z8BAK	
	460V	200		ECS98Z1CAK	ECS98Z2CAK	ECS98Z4CAK	ECS98Z8CAK	
	575V	250		ECS98Z1DAK	ECS98Z2DAK	ECS98Z4DAK	ECS98Z8DAK	
<b>Frame E</b>								
302A	200V	100	120 Vac	ECS9811EAK	ECS9812EAK	ECS9814EAK	ECS9818EAK	S611E302P3S
	230V	100		ECS9811BAK	ECS9812BAK	ECS9814BAK	ECS9818BAK	
	460V	250		ECS9811CAK	ECS9812CAK	ECS9814CAK	ECS9818CAK	
	575V	300		ECS9811DAK	ECS9812DAK	ECS9814DAK	ECS9818DAK	
361A	200V	125	120 Vac	ECS9821EAL	ECS9822EAL	ECS9824EAL	ECS9828EAL	S611E361P3S
	230V	150		ECS9821BAL	ECS9822BAL	ECS9824BAL	ECS9828BAL	
	460V	300		ECS9821CAL	ECS9822CAL	ECS9824CAL	ECS9828CAL	
	575V	350		ECS9821DAL	ECS9822DAL	ECS9824DAL	ECS9828DAL	
<b>Frame F</b>								
414A	200V	150	120 Vac	ECS9831EAL	ECS9832EAL	ECS9834EAL	ECS9838EAL	S611F414P3S
	230V	150		ECS9831BAL	ECS9832BAL	ECS9834BAL	ECS9838BAL	
	460V	350		ECS9831CAL	ECS9832CAL	ECS9834CAL	ECS9838CAL	
	575V	450		ECS9831DAL	ECS9832DAL	ECS9834DAL	ECS9838DAL	

#### Notes

- ① Standard duty horsepower ratings are for 300% ramp current, 15 seconds ramp time, and 115% continuous. Consult Eaton for other ratings.
- ② The catalog numbers listed in the Type 4X column are for Type 4X 304-Grade stainless steel, as indicated by the **seventh** digit. Example: ECS98Z4EAA. To order Type 4X 316-Grade stainless steel, change that digit to **9**. To order Type 4 painted steel, change that digit to **3**. To order non-metallic, change that digit to **5**. For details on these alternate enclosures, see **Tab 12**.

### Wiring Diagram

Sample—S611 with CPT and HOA Selector Switch



# 5.1

## Reduced Voltage Starter

### S611 Solid-State Soft Starter

#### Dimensions

See **Tab 14** for box dimensions for Type 1, 3R, 4X and 12.

#### Minimum Enclosure Box Numbers

Rating	SSRV	Non-Combination Box No. ①	Combination with Disconnect Switch Box No. ①	Combination with Circuit Breaker Box No. ①
52A	S611	D	D	D
65A	S611	D	D	D
77A	S611	D	D	D
99A	S611	D	D	D
125A	S611	D	D	D
156A	S611	E	F1E	E
180A	S611	E	F1E	E
242A	S611	E	F1E	E
302A	S611	F1E	F2E	F1E
361A	S611	F1E	F2E	F1E
414A	S611	F1E	F2E	F1E

#### Lug Kits

Description	S611 Current Rating	Accessory Kit Part Number
Lug kit—mechanical	52–77A	<b>S611-LUG-M01</b>
	99–125A	<b>S611-LUG-M02</b>
	156–242A	<b>S611-LUG-M03</b>
	302–414A	<b>S611-LUG-M04</b>

#### Note

① Enclosure space will also accommodate two four-pole relays, CPT, and terminal blocks.