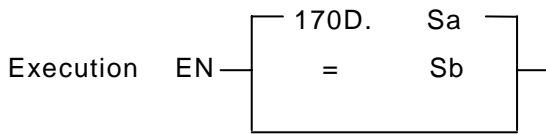


FUN170 <b>D</b> =	EQUAL TO COMPARE ( Compare whether Sa is equal to Sb )	FUN170 <b>D</b> =
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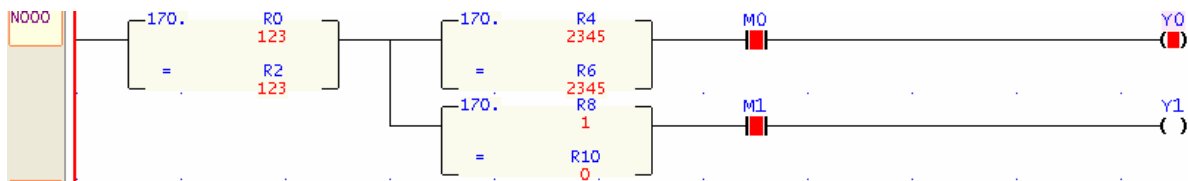


Sa : Operand A or the starting address of Sa  
 Sb : Operand B or the starting address of Sb  
 Sa · Sb may combine with V · Z · P0~P9 for indirect addressing application  
 \* This instruction can be supported in PLC OS firmware V4.60 or later

Operand \ Range	WX	WY	WM	WS	TMR	CTR	HR	SR	ROR	DR	K	XR
	WX0   WX240	WY0   WY240	WM0   WM1896	WS0   WS984	T0   T255	C0   C255	R0   R3839	R3804   R4167	R5000   R8071	D0   D3999	16/ 32 bit +/- number	V · Z P0-P9
Sa	○	○	○	○	○	○	○	○	○	○	○	○
Sb	○	○	○	○	○	○	○	○	○	○	○	○

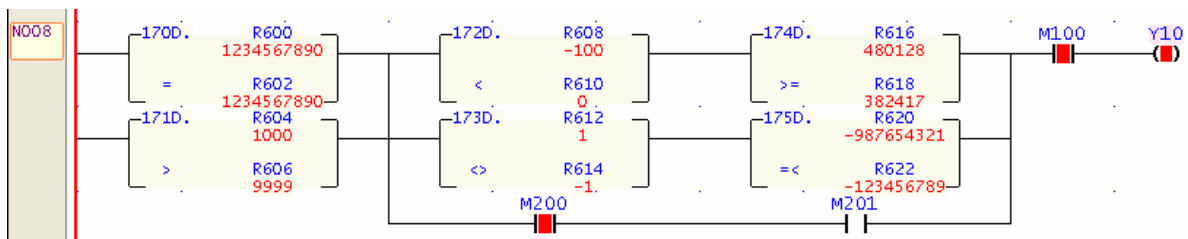
- When execution input "EN" =1, this instruction will be executed in signed number to compare Sa with Sb. If Sa=Sb, the output is 1; otherwise the output is 0.

**Example 1 :**



Description: When R0=R2 · R4=R6 and M0=1, the output status of Y0 is 1; otherwise it is 0  
 R0=R2 · R8=R10 and M1=1, the output status of Y1 is 1; otherwise it is 0

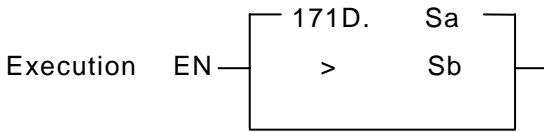
**Example 2 :**



Description: When DR600=DR602 or DR604>DR606, after them DR608<DR610 and DR616 ≥ DR618, or DR612 ≠ DR614 and DR620 ≤ DR622, or M200=1 and M201=1, and then M100=1, the output status of Y10 is 1; otherwise it is 0.

Mathematic instruction

FUN171 <b>D</b> >	<b>GREATER THAN COMPARE</b> ( Compare whether Sa is greater than Sb )	FUN171 <b>D</b> >
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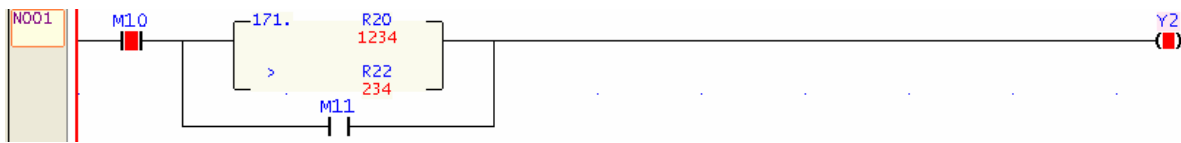


Sa : Operand A or the starting address of Sa  
 Sb : Operand B or the starting address of Sb  
 Sa · Sb may combine with V · Z · P0~P9 for indirect addressing application  
 \* This instruction can be supported in PLC OS firmware V4.60 or later

Operand	WX	WY	WM	WS	TMR	CTR	HR	SR	ROR	DR	K	XR
	Range	WX0   WX240	WY0   WY240	WM0   WM1896	WS0   WS984	T0   T255	C0   C255	R0   R3839	R3804   R4167	R5000   R8071	D0   D3999	16/ 32 bit +/- number
Sa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sb	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

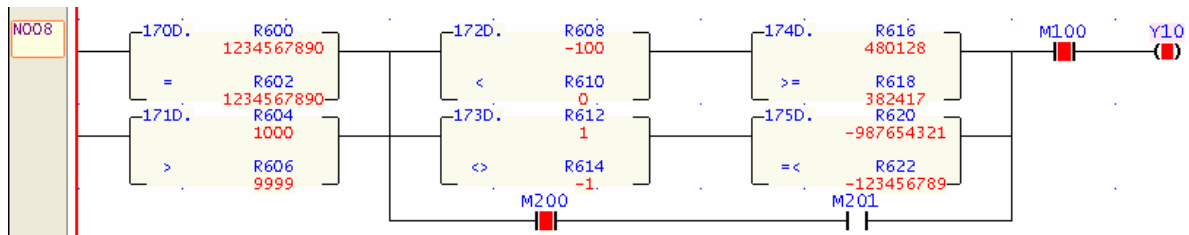
- When execution input "EN" =1, this instruction will be executed in signed number to compare Sa with Sb. If Sa>Sb, the output is 1; otherwise the output is 0.

Example 1 :



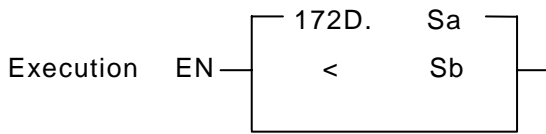
Description: When M10=1 · R20 > R22 or M11=1, the output status of Y2 is 1; otherwise it is 0.

Example 2 :



Description: When DR600=DR602 or DR604>DR606, after them DR608<DR610 and DR616 ≥ DR618, or DR612 ≠ DR614 and DR620 ≤ DR622, or M200=1 and M201=1, and then M100=1, the output status of Y10 is 1; otherwise it is 0.

FUN172 <b>D</b> <	<b>LESS THAN COMPARE</b> ( Compare whether Sa is less than Sb )	FUN172 <b>D</b> <
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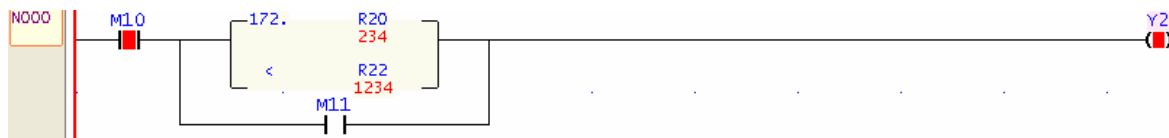


Sa : Operand A or the starting address of Sa  
 Sb : Operand B or the starting address of Sb  
 Sa · Sb may combine with V · Z · P0~P9 for indirect addressing application  
 \* This instruction can be supported in PLC OS firmware V4.60 or later

Operand	WX	WY	WM	WS	TMR	CTR	HR	SR	ROR	DR	K	XR
	Range	WX0   WX240	WY0   WY240	WM0   WM1896	WS0   WS984	T0   T255	C0   C255	R0   R3839	R3804   R4167	R5000   R8071	D0   D3999	16/ 32 bit +/- number
Sa	○	○	○	○	○	○	○	○	○	○	○	○
Sb	○	○	○	○	○	○	○	○	○	○	○	○

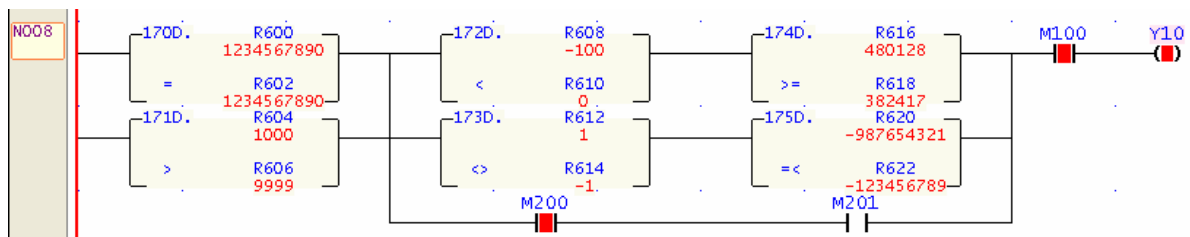
- When execution input "EN" =1, this instruction will be executed in signed number to compare Sa with Sb. If Sa<Sb, the output is 1; otherwise the output is 0.

**Example 1 :**



Description: When M10=1 · R20 < R22 or M11=1, the output status of Y2 is 1; otherwise it is 0.

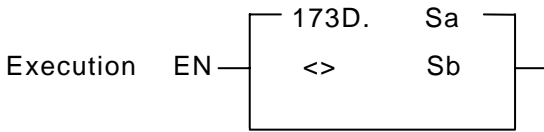
**Example 2 :**



Description: When DR600=DR602 or DR604>DR606, after them DR608<DR610 and DR616 ≥ DR618, or DR612 ≠ DR614 and DR620 ≤ DR622, or M200=1 and M201=1, and then M100=1, the output status of Y10 is 1; otherwise it is 0.

Mathematic instruction

FUN173 <b>D</b> <>	NOT EQUAL TO COMPARE ( Compare whether Sa is not equal to Sb )	FUN173 <b>D</b> <>
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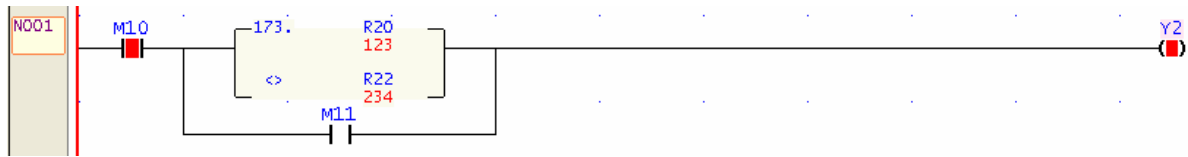


Sa : Operand A or the starting address of Sa  
 Sb : Operand B or the starting address of Sb  
 Sa · Sb may combine with V · Z · P0~P9 for indirect addressing application  
 \* This instruction can be supported in PLC OS firmware V4.60 or later

Operand	WX	WY	WM	WS	TMR	CTR	HR	SR	ROR	DR	K	XR
	Range	WX0   WX240	WY0   WY240	WM0   WM1896	WS0   WS984	T0   T255	C0   C255	R0   R3839	R3804   R4167	R5000   R8071	D0   D3999	16/ 32 bit +/- number
Sa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sb	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

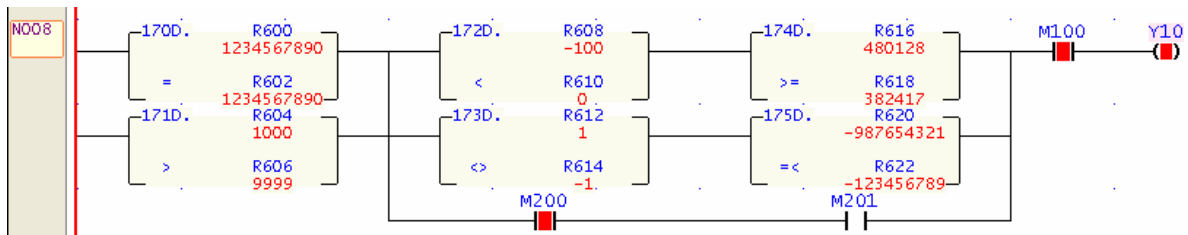
- When execution input "EN" =1, this instruction will be executed in signed number to compare Sa with Sb. If Sa ≠ Sb, the output is 1; otherwise the output is 0.

Example 1 :



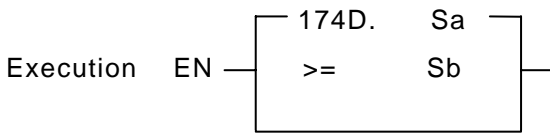
Description: When M10=1 · R20 ≠ R22 or M11=1, the output status of Y2 is 1; otherwise it is 0.

Example 2 :



Description: When DR600=DR602 or DR604>DR606, after them DR608<DR610 and DR616 ≥ DR618, or DR612 ≠ DR614 and DR620 ≤ DR622, or M200=1 and M201=1, and then M100=1, the output status of Y10 is 1; otherwise it is 0.

FUN174 <b>D</b> >=	<b>GREATER THAN OR EQUAL TO COMPARE</b> ( Compare whether Sa is greater than or equal to Sb )	FUN174 <b>D</b> >=
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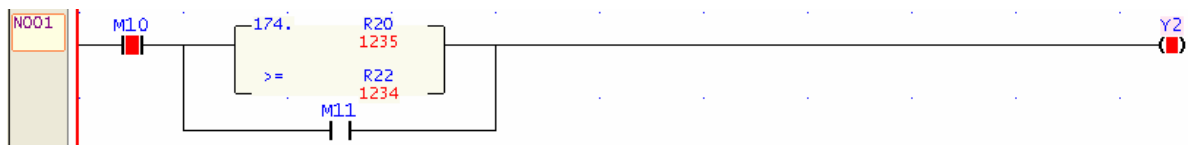


Sa : Operand A or the starting address of Sa  
 Sb : Operand B or the starting address of Sb  
 Sa · Sb may combine with V · Z · P0~P9 for indirect addressing application  
 \* This instruction can be supported in PLC OS firmware V4.60 or later

Operand Range	WX	WY	WM	WS	TMR	CTR	HR	SR	ROR	DR	K	XR
		WX240	WY240	WM1896	WS984	T255	C255	R3839	R4167	R8071	D3999	16/ 32 bit +/- number
Sa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sb	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

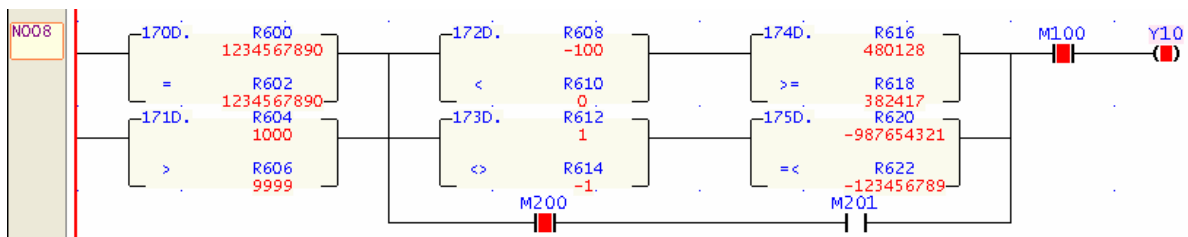
- When execution input "EN" =1, this instruction will be executed in signed number to compare Sa with Sb. If  $Sa \geq Sb$ , the output is 1; otherwise the output is 0.

**Example 1 :**



Description: When M10=1 · R20 ≥ R22 or M11=1, the output status of Y2 is 1; otherwise it is 0.

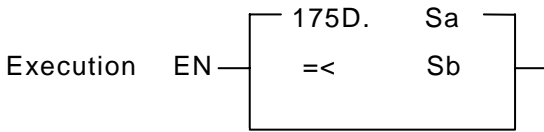
**Example 2 :**



Description: When DR600=DR602 or DR604>DR606, after them DR608<DR610 and DR616 ≥ DR618, or DR612 ≠ DR614 and DR620 ≤ DR622, or M200=1 and M201=1, and then M100=1, the output status of Y10 is 1; otherwise it is 0.

Mathematic instruction

FUN175 <b>D</b> =<	<b>LESS THAN OR EQUAL TO COMPARE</b> ( Compare whether Sa is less than or equal to Sb )	FUN175 <b>D</b> =<
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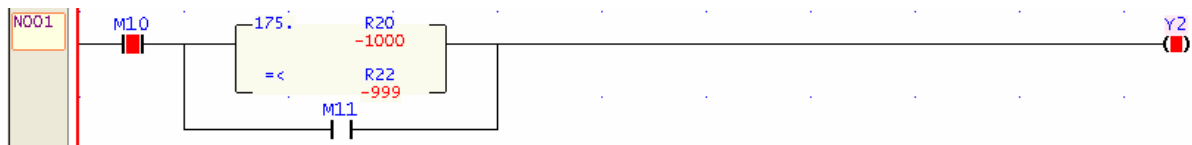


Sa : Operand A or the starting address of Sa  
 Sb : Operand B or the starting address of Sb  
 Sa · Sb may combine with V · Z · P0~P9 for indirect addressing application  
 \* This instruction can be supported in PLC OS firmware V4.60 or later

Operand Range	WX	WY	WM	WS	TMR	CTR	HR	SR	ROR	DR	K	XR
		WX240	WY240	WM1896	WS984	T255	C255	R3839	R4167	R8071	D3999	16/ 32 bit +/- number
Sa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sb	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

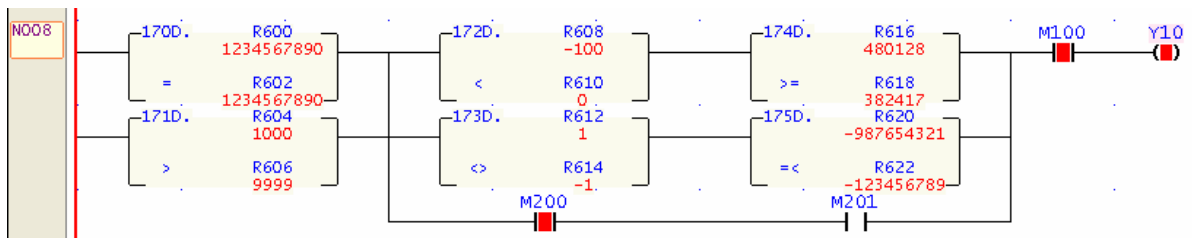
- When execution input "EN" =1, this instruction will be executed in signed number to compare Sa with Sb. If  $Sa \leq Sb$ , the output is 1; otherwise the output is 0.

Example 1 :



Description: When  $M10=1 \cdot R20 \leq R22$  or  $M11=1$ , the output status of Y2 is 1; otherwise it is 0.

Example 2 :



Description: When  $DR600=DR602$  or  $DR604>DR606$ , after them  $DR608<DR610$  and  $DR616 \geq DR618$ , or  $DR612 \neq DR614$  and  $DR620 \leq DR622$ , or  $M200=1$  and  $M201=1$ , and then  $M100=1$ , the output status of Y10 is 1; otherwise it is 0.