

# PlcUserDefinedTypeOperand Class

**Namespace:** IPS7Lnk.Advanced

**Assemblies:** IPS7LnkNet.Advanced.dll

Represents an operand which addresses a user defined type within a programmable logic controller (PLC).

**C#**

```
[Serializable]
public class PlcUserDefinedTypeOperand : PlcOperand, IComparable, ISerializable,
    IEquatable<PlcOperand>, IComparable<PlcOperand>, IEquatable<PlcUserDefinedTypeOperand>,
    IComparable<PlcUserDefinedTypeOperand>
```

**Inheritance** [Object](#) > [PlcIdentity](#) > [PlcOperand](#) > [PlcUserDefinedTypeOperand](#)

**Attributes** [SerializableAttribute](#)

**Implements** [IComparable](#), [Serialization.ISerializable](#), [IEquatable<PlcOperand>](#),  
[IComparable<PlcOperand>](#), [IEquatable<PlcUserDefinedTypeOperand>](#),  
[IComparable<PlcUserDefinedTypeOperand>](#)

## Constructors

| Name  | Description   |
|---|---|
| <a href="#">PlcUserDefinedTypeOperand</a> ( <a href="#">Serialization.SerializationInfo</a> ,<br><a href="#">Serialization.StreamingContext</a> ) | Initializes a new instance of the <a href="#">PlcUserDefinedTypeOperand</a> class with serialized data. |

## Fields

| Name                      | Description   |
|---------------------------|---|
| <a href="#">MaxNumber</a> | Specifies the maximum value that can be assigned to the <a href="#">Number</a> property. (Inherited from <a href="#">PlcOperand</a> ) |
| <a href="#">MinNumber</a> | Specifies the minimum value that can be assigned to the <a href="#">Number</a> property. (Inherited from <a href="#">PlcOperand</a> ) |

## Properties

| Name                    | Description  |
|-------------------------|--|
| <a href="#">Counter</a> | Gets the operand used to access the counter memory block of the controller. (Inherited from <a href="#">PlcOperand</a> ) |
| <a href="#">Flag</a>    | Gets the operand used to access the flag memory block of the controller. (Inherited from <a href="#">PlcOperand</a> )    |
| <a href="#">Input</a>   | Gets the operand used to access the input memory block of the controller. (Inherited from <a href="#">PlcOperand</a> )   |
| <a href="#">Number</a>  | Gets the number associated with the operand. (Inherited from <a href="#">PlcOperand</a> )                                |

| Name            | Description  |
|-----------------|--|
| OriginalString  | Gets the original string from that the operand was created.<br>(Inherited from <a href="#">PlcOperand</a> )                                      |
| Output          | Gets the operand used to access the output memory block of the controller.<br>(Inherited from <a href="#">PlcOperand</a> )                       |
| PeripheryInput  | Gets the operand used to access the peripheryInput memory block of the controller.<br>(Inherited from <a href="#">PlcOperand</a> )               |
| PeripheryOutput | Gets the operand used to access the peripheryOutput memory block of the controller.<br>(Inherited from <a href="#">PlcOperand</a> )              |
| Standard        | Gets a value indicating which <a href="#">PlcOperandStandard</a> was used to create the operand.<br>(Inherited from <a href="#">PlcOperand</a> ) |
| Timer           | Gets the operand used to access the timer memory block of the controller.<br>(Inherited from <a href="#">PlcOperand</a> )                        |
| Type            | Gets the type of operand represented.<br>(Inherited from <a href="#">PlcOperand</a> )  |

## Methods

| Name                                 | Description  |
|--------------------------------------|--|
| All                                  | Retrieves all <a href="#">PlcOperand</a> instances which can be typically addressed within a PLC including the custom data block operands used so far.<br>(Inherited from <a href="#">PlcOperand</a> ) |
| CompareTo(Object)                    | Compares the current <a href="#">PlcUserDefinedTypeOperand</a> with the <b>other</b> .   |
| CompareTo(Object)                    | Compares the current <a href="#">PlcIdentity</a> with the <b>other</b> .<br>(Inherited from <a href="#">PlcIdentity</a> )  |
| CompareTo(Object)                    | Compares the current <a href="#">PlcOperand</a> with the <b>other</b> .<br>(Inherited from <a href="#">PlcOperand</a> )  |
| CompareTo(PlcOperand)                | Compares the current <a href="#">PlcOperand</a> with another <a href="#">PlcOperand</a> .<br>(Inherited from <a href="#">PlcOperand</a> )  |
| CompareTo(PlcUserDefinedTypeOperand) | Compares the current <a href="#">PlcUserDefinedTypeOperand</a> with another <a href="#">PlcUserDefinedTypeOperand</a> .  |
| DataBlock(Int32)                     | Retrieves the according <a href="#">PlcDataBlockOperand</a> using the specified <b>number</b> of the data block operand.<br>(Inherited from <a href="#">PlcOperand</a> )                               |
| Equals(Object)                       | Determines whether the specified <b>other</b> is equal to this <a href="#">PlcUserDefinedTypeOperand</a> .   |
| Equals(Object)                       | Determines whether the specified <b>other</b> is equal to this <a href="#">PlcIdentity</a> .<br>(Inherited from <a href="#">PlcIdentity</a> )  |
| Equals(Object)                       | Determines whether the specified <b>other</b> is equal to this <a href="#">PlcOperand</a> .<br>(Inherited from <a href="#">PlcOperand</a> )  |
| Equals(PlcOperand)                   | Determines whether the specified <b>other</b> is equal to this <a href="#">PlcOperand</a> .<br>(Inherited from <a href="#">PlcOperand</a> )  |
| Equals(PlcUserDefinedTypeOperand)    | Determines whether the specified <b>other</b> is equal to this <a href="#">PlcUserDefinedTypeOperand</a> .   |
| GetHashCode                          | Retrieves a hash code for this <a href="#">PlcUserDefinedTypeOperand</a> .   |

| Name   | Description   |
|--|---|
| GetHashCode  | Retrieves a hash code for this <a href="#">PlcIdentity</a> .<br>(Inherited from <a href="#">PlcIdentity</a> )   |
| GetHashCode  | Retrieves a hash code for this <a href="#">PlcOperand</a> .<br>(Inherited from <a href="#">PlcOperand</a> )   |
| GetObjectData(Serialization.SerializationInfo, Serialization.StreamingContext) | Sets the <a href="#">Serialization.SerializationInfo</a> with information about the exception.  |
| GetObjectData(Serialization.SerializationInfo, Serialization.StreamingContext) | Sets the <a href="#">Serialization.SerializationInfo</a> with information about the exception.<br>(Inherited from <a href="#">PlcIdentity</a> )   |
| GetObjectData(Serialization.SerializationInfo, Serialization.StreamingContext) | Sets the <a href="#">Serialization.SerializationInfo</a> with information about the exception.<br>(Inherited from <a href="#">PlcOperand</a> )  |
| GetSupportedRawTypes(PlcOperandType)   | Retrieves the <a href="#">PlcRawType</a> members supported by the <a href="#">PlcOperandType</a> specified by <a href="#">type</a> .<br>(Inherited from <a href="#">PlcOperand</a> )  |
| IsSupported(PlcOperandType, PlcRawType)  | Determines whether the specified <a href="#">rawType</a> can be used to address the PLC memory identified by the <a href="#">PlcOperandType</a> specified by <a href="#">type</a> .<br>(Inherited from <a href="#">PlcOperand</a> ) |
| Of(PlcOperandType)   | Retrieves the according <a href="#">PlcOperand</a> which matches the <a href="#">PlcOperandType</a> specified.<br>(Inherited from <a href="#">PlcOperand</a> )  |
| Parse(String)  | Converts an operand string to a <a href="#">PlcOperand</a> instance.<br>(Inherited from <a href="#">PlcOperand</a> )  |
| ToString   | Converts the name to its string representation.<br>(Inherited from <a href="#">PlcIdentity</a> )  |
| ToString   | Converts the operand to its string representation.<br>(Inherited from <a href="#">PlcOperand</a> )  |
| ToString(PlcOperandStandard)   | Converts the operand to its string representation using the specified <a href="#">standard</a> .<br>(Inherited from <a href="#">PlcOperand</a> )  |
| TryParse(String, PlcOperand@)  | Determines whether a string is a valid operand.<br>(Inherited from <a href="#">PlcOperand</a> )   |
| UserDefinedType(Int32)   | Retrieves the according <a href="#">PlcUserDefinedTypeOperand</a> using the specified <a href="#">number</a> of the user defined type operand.<br>(Inherited from <a href="#">PlcOperand</a> )                                      |

## Operators

| Name  | Description  |
|---|--|
| op_Equality(PlcIdentity, PlcIdentity)                             | Returns a value indicating whether two instance of <a href="#">PlcIdentity</a> are equal.<br>(Inherited from <a href="#">PlcIdentity</a> ) |
| op_Equality(PlcOperand, PlcOperand)                               | Returns a value indicating whether two instance of <a href="#">PlcOperand</a> are equal.<br>(Inherited from <a href="#">PlcOperand</a> )   |
| op_Equality(PlcUserDefinedTypeOperand, PlcUserDefinedTypeOperand) | Returns a value indicating whether two instance of <a href="#">PlcUserDefinedTypeOperand</a> are equal.                                    |

| Name  | Description   |
|---|---|
| op_GreaterThan(PlcIdentity, PlcIdentity)                                    | Determines whether the first specified <a href="#">PlcIdentity</a> object is greater than the second specified <a href="#">PlcIdentity</a> object.<br>(Inherited from <a href="#">PlcIdentity</a> )             |
| op_GreaterThan(PlcOperand, PlcOperand)                                      | Determines whether the first specified <a href="#">PlcOperand</a> object is greater than the second specified <a href="#">PlcOperand</a> object.<br>(Inherited from <a href="#">PlcOperand</a> )                |
| op_GreaterThan(PlcUserDefinedTypeOperand, PlcUserDefinedTypeOperand)        | Determines whether the first specified <a href="#">PlcUserDefinedTypeOperand</a> object is greater than the second specified <a href="#">PlcUserDefinedTypeOperand</a> object.                                  |
| op_GreaterThanOrEqual(PlcIdentity, PlcIdentity)                             | Determines whether the first specified <a href="#">PlcIdentity</a> object is greater than or equal to the second specified <a href="#">PlcIdentity</a> object.<br>(Inherited from <a href="#">PlcIdentity</a> ) |
| op_GreaterThanOrEqual(PlcOperand, PlcOperand)                               | Determines whether the first specified <a href="#">PlcOperand</a> object is greater than or equal to the second specified <a href="#">PlcOperand</a> object.<br>(Inherited from <a href="#">PlcOperand</a> )    |
| op_GreaterThanOrEqual(PlcUserDefinedTypeOperand, PlcUserDefinedTypeOperand) | Determines whether the first specified <a href="#">PlcUserDefinedTypeOperand</a> object is greater than or equal to the second specified <a href="#">PlcUserDefinedTypeOperand</a> object.                      |
| op_Implicit(Advanced.PlcIdentity)   | Converts a string formatted as name to an <a href="#">PlcIdentity</a> object.<br>(Inherited from <a href="#">PlcIdentity</a> )  |
| op_Implicit(Advanced.PlcOperand)  | Converts a string formatted as operand to an <a href="#">PlcOperand</a> object.<br>(Inherited from <a href="#">PlcOperand</a> )   |
| op_Implicit(Advanced.PlcUserDefinedTypeOperand)                             | Converts a string formatted as operand to an <a href="#">PlcUserDefinedTypeOperand</a> object.  |
| op_Inequality(PlcIdentity, PlcIdentity)                                     | Returns a value indicating whether two instances of <a href="#">PlcIdentity</a> are not equal.<br>(Inherited from <a href="#">PlcIdentity</a> )   |
| op_Inequality(PlcOperand, PlcOperand)                                       | Returns a value indicating whether two instances of <a href="#">PlcOperand</a> are not equal.<br>(Inherited from <a href="#">PlcOperand</a> )   |
| op_Inequality(PlcUserDefinedTypeOperand, PlcUserDefinedTypeOperand)         | Returns a value indicating whether two instances of <a href="#">PlcUserDefinedTypeOperand</a> are not equal.  |
| op_LessThan(PlcIdentity, PlcIdentity)                                       | Determines whether the first specified <a href="#">PlcIdentity</a> object is less than the second specified <a href="#">PlcIdentity</a> object.<br>(Inherited from <a href="#">PlcIdentity</a> )                |
| op_LessThan(PlcOperand, PlcOperand)   | Determines whether the first specified <a href="#">PlcOperand</a> object is less than the second specified <a href="#">PlcOperand</a> object.<br>(Inherited from <a href="#">PlcOperand</a> )                   |
| op_LessThan(PlcUserDefinedTypeOperand, PlcUserDefinedTypeOperand)           | Determines whether the first specified <a href="#">PlcUserDefinedTypeOperand</a> object is less than the second specified <a href="#">PlcUserDefinedTypeOperand</a> object.                                     |

| Name   | Description  |
|--|--|
| op_LessThanOrEqual(PlcIdentity, PlcIdentity)                             | Determines whether the first specified <a href="#">PlcIdentity</a> object is less than or equal to the second <a href="#">PlcIdentity</a> object.<br>(Inherited from <a href="#">PlcIdentity</a> ) |
| op_LessThanOrEqual(PlcOperand, PlcOperand)                               | Determines whether the first specified <a href="#">PlcOperand</a> object is less than or equal to the second <a href="#">PlcOperand</a> object.<br>(Inherited from <a href="#">PlcOperand</a> )    |
| op_LessThanOrEqual(PlcUserDefinedTypeOperand, PlcUserDefinedTypeOperand) | Determines whether the first specified <a href="#">PlcUserDefinedTypeOperand</a> object is less than or equal to the second <a href="#">PlcUserDefinedTypeOperand</a> object.                      |



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