

# PlcDataBlockOperand Class

**Namespace:** IPS7Lnk.Advanced

**Assemblies:** IPS7LnkNet.Advanced.dll

Represents an operand which addresses a data block within a programmable logic controller (PLC).

**C#**

```

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

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

**Attributes** [SerializableAttribute](#)

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

## Constructors

Name	Description
<a href="#">PlcDataBlockOperand</a> ( <a href="#">Serialization.SerializationInfo</a> , <a href="#">Serialization.StreamingContext</a> )	Initializes a new instance of the <a href="#">PlcDataBlockOperand</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. (Inherited from <a href="#">PlcOperand</a> )
Output	Gets the operand used to access the output memory block of the controller. (Inherited from <a href="#">PlcOperand</a> )
PeripheryInput	Gets the operand used to access the peripheryInput memory block of the controller. (Inherited from <a href="#">PlcOperand</a> )
PeripheryOutput	Gets the operand used to access the peripheryOutput memory block of the controller. (Inherited from <a href="#">PlcOperand</a> )
Standard	Gets a value indicating which <a href="#">PlcOperandStandard</a> was used to create the operand. (Inherited from <a href="#">PlcOperand</a> )
Timer	Gets the operand used to access the timer memory block of the controller. (Inherited from <a href="#">PlcOperand</a> )
Type	Gets the type of operand represented. (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. (Inherited from <a href="#">PlcOperand</a> )
Byte(Int32)	Creates a new <a href="#">PlcByteAddress</a> from this <a href="#">PlcDataBlockOperand</a> using the <a href="#">byteNumber</a> specified.
CompareTo(Object)	Compares the current <a href="#">PlcDataBlockOperand</a> with the <a href="#">other</a> .
CompareTo(Object)	Compares the current <a href="#">PlcIdentity</a> with the <a href="#">other</a> . (Inherited from <a href="#">PlcIdentity</a> )
CompareTo(Object)	Compares the current <a href="#">PlcOperand</a> with the <a href="#">other</a> . (Inherited from <a href="#">PlcOperand</a> )
CompareTo(PlcDataBlockOperand)	Compares the current <a href="#">PlcDataBlockOperand</a> with another <a href="#">PlcDataBlockOperand</a> .
CompareTo(PlcOperand)	Compares the current <a href="#">PlcOperand</a> with another <a href="#">PlcOperand</a> . (Inherited from <a href="#">PlcOperand</a> )
DataBlock(Int32)	Retrieves the according <a href="#">PlcDataBlockOperand</a> using the specified <a href="#">number</a> of the data block operand. (Inherited from <a href="#">PlcOperand</a> )
DWord(Int32)	Creates a new <a href="#">PlcDWordAddress</a> from this <a href="#">PlcDataBlockOperand</a> using the <a href="#">byteNumber</a> specified.
Equals(Object)	Determines whether the specified <a href="#">other</a> is equal to this <a href="#">PlcDataBlockOperand</a> .
Equals(Object)	Determines whether the specified <a href="#">other</a> is equal to this <a href="#">PlcIdentity</a> . (Inherited from <a href="#">PlcIdentity</a> )
Equals(Object)	Determines whether the specified <a href="#">other</a> is equal to this <a href="#">PlcOperand</a> . (Inherited from <a href="#">PlcOperand</a> )
Equals(PlcDataBlockOperand)	Determines whether the specified <a href="#">other</a> is equal to this <a href="#">PlcDataBlockOperand</a> .

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

## Operators

Name	Description
op_Equality(PlcDataBlockOperand, PlcDataBlockOperand)	Returns a value indicating whether two instance of <b>PlcDataBlockOperand</b> are equal.

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

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



# Table of Contents

<b>Constructors</b>	1
<b>Fields</b>	1
<b>Properties</b>	1
<b>Methods</b>	2
<b>Operators</b>	3