

# PlcDataBlockOperand Members

**Namespace:** IPS7Lnk.Advanced

**Assemblies:** IPS7LnkNet.Advanced.dll, IPS7LnkNet.Advanced.dll

The [PlcDataBlockOperand](#) type exposes the following members.

## Constructors

### PlcDataBlockOperand(SerializationInfo, StreamingContext)

Initializes a new instance of the [PlcDataBlockOperand](#) class with serialized data.

**C#**

```
protected PlcDataBlockOperand(SerializationInfo info, StreamingContext context)
```

#### Parameters

**info** [Serialization.SerializationInfo](#)

The [Serialization.SerializationInfo](#) that holds the serialized object data about the exception being thrown.

**context** [Serialization.StreamingContext](#)

The [Serialization.StreamingContext](#) that contains contextual information about the source or destination.

#### Exceptions

[ArgumentNullException](#)

The info parameter is null reference (Nothing in Visual Basic).

[Serialization.SerializationException](#)

The class name is null reference (Nothing in Visual Basic) or [HResult](#) is zero (0).

## Methods

### Byte(Int32)

Creates a new [PlcByteAddress](#) from this [PlcDataBlockOperand](#) using the **byteNumber** specified.

**C#**

```
public PlcByteAddress Byte(int byteNumber)
```

#### Parameters

**byteNumber** Int32

The number of the byte to that the new [PlcByteAddress](#) refers.

## Returns

[PlcByteAddress](#)

A new [PlcByteAddress](#) which refers to this operand and to the **byteNumber** specified.

## Exceptions

[ArgumentOutOfRangeException](#)

The **byteNumber** is out of the bounds defined by [MinByteNumber](#) or [MaxByteNumber](#).

# CompareTo(Object)

Compares the current [PlcDataBlockOperand](#) with the **other**.

## C#

```
public override int CompareTo(object other)
```

## Parameters

**other** Object

The [PlcDataBlockOperand](#) to compare with this [PlcDataBlockOperand](#).

## Returns

Int32

A 32-bit signed integer that indicates the relative order of the objects being compared ([CompareTo\(Object\)](#)).

# CompareTo(PlcDataBlockOperand)

Compares the current [PlcDataBlockOperand](#) with another [PlcDataBlockOperand](#).

## C#

```
public int CompareTo(PlcDataBlockOperand other)
```

## Parameters

**other** PlcDataBlockOperand

The [PlcDataBlockOperand](#) to compare with this [PlcDataBlockOperand](#).

## Returns

Int32

A 32-bit signed integer that indicates the relative order of the objects being compared ([CompareTo\(\)](#)).

## DWord(Int32)

Creates a new [PlcDWordAddress](#) from this [PlcDataBlockOperand](#) using the `byteNumber` specified.

### C#

```
public PlcDWordAddress DWord(int byteNumber)
```

## Parameters

`byteNumber` Int32

The number of the byte to that the new [PlcDWordAddress](#) refers.

## Returns

[PlcDWordAddress](#)

A new [PlcDWordAddress](#) which refers to this operand and to the `byteNumber` specified.

## Exceptions

[ArgumentOutOfRangeException](#)

The `byteNumber` is out of the bounds defined by [MinByteNumber](#) or [MaxByteNumber](#).

## Equals(Object)

Determines whether the specified `other` is equal to this [PlcDataBlockOperand](#).

### C#

```
public override bool Equals(object other)
```

## Parameters

`other` Object

The [PlcDataBlockOperand](#) to compare to the current [PlcDataBlockOperand](#).

## Returns

Boolean

The value true if the specified [PlcDataBlockOperand](#) is equal to the current [PlcDataBlockOperand](#);

otherwise the value false.

## Equals(PlcDataBlockOperand)

Determines whether the specified `other` is equal to this `PlcDataBlockOperand`.

### C#

```
public bool Equals(PlcDataBlockOperand other)
```

#### Parameters

`other` `PlcDataBlockOperand`

The `PlcDataBlockOperand` to compare to the current `PlcDataBlockOperand`.

#### Returns

`Boolean`

The value true if the specified `PlcDataBlockOperand` is equal to the current `PlcDataBlockOperand`; otherwise the value false.

## GetHashCode()

Retrieves a hash code for this `PlcDataBlockOperand`.

### C#

```
public override int GetHashCode()
```

#### Returns

`Int32`

An `Int32` that contains the hash code for the `PlcDataBlockOperand`.

## GetObjectData(SerializationInfo, StreamingContext)

Sets the `Serialization.SerializationInfo` with information about the exception.

### C#

```
[SecurityPermission(SecurityAction.LinkDemand, Flags =
SecurityPermissionFlag.SerializationFormatter)]
public override void GetObjectData(SerializationInfo info, StreamingContext context)
```

#### Parameters

`info` `Serialization.SerializationInfo`

The `Serialization.SerializationInfo` that holds the serialized object data about the exception being thrown.

### context `Serialization.StreamingContext`

The `Serialization.StreamingContext` that contains contextual information about the source or destination.

## Exceptions

### ArgumentNullException

The `info` parameter is a null reference (Nothing in Visual Basic).

## Word(Int32)

Creates a new `PlcWordAddress` from this `PlcDataBlockOperand` using the `byteNumber` specified.

### C#

```
public PlcWordAddress Word(int byteNumber)
```

## Parameters

### byteNumber Int32

The number of the byte to that the new `PlcWordAddress` refers.

## Returns

### PlcWordAddress

A new `PlcWordAddress` which refers to this operand and to the `byteNumber` specified.

## Exceptions

### ArgumentOutOfRangeException

The `byteNumber` is out of the bounds defined by `MinByteNumber` or `MaxByteNumber`.

## Operators

## Equality(PlcDataBlockOperand, PlcDataBlockOperand)

Returns a value indicating whether two instance of `PlcDataBlockOperand` are equal.

### C#

```
public static bool operator ==(PlcDataBlockOperand left, PlcDataBlockOperand right)
```

## GreaterThan(PlcDataBlockOperand, PlcDataBlockOperand)

Determines whether the first specified [PlcDataBlockOperand](#) object is greater than the second specified [PlcDataBlockOperand](#) object.

C#

```
public static bool operator>(PlcDataBlockOperand left, PlcDataBlockOperand right)
```

## GreaterThanOrEqual(PlcDataBlockOperand, PlcDataBlockOperand)

Determines whether the first specified [PlcDataBlockOperand](#) object is greater than or equal to the second specified [PlcDataBlockOperand](#) object.

C#

```
public static bool operator >=(PlcDataBlockOperand left, PlcDataBlockOperand right)
```

## Implicit(String to PlcDataBlockOperand)

Converts a string formatted as operand to an [PlcDataBlockOperand](#) object.

C#

```
public static implicit operator PlcDataBlockOperand(string value)
```

### Exceptions

[FormatException](#)

The `value` is not a valid PLC operand.

## Inequality(PlcDataBlockOperand, PlcDataBlockOperand)

Returns a value indicating whether two instances of [PlcDataBlockOperand](#) are not equal.

C#

```
public static bool operator !=(PlcDataBlockOperand left, PlcDataBlockOperand right)
```

## LessThan(PlcDataBlockOperand, PlcDataBlockOperand)

Determines whether the first specified [PlcDataBlockOperand](#) object is less than the second specified [PlcDataBlockOperand](#) object.

C#

```
public static bool operator <(PlcDataBlockOperand left, PlcDataBlockOperand right)
```

## Exceptions

### ArgumentNullException

The **left** is a null reference (Nothing in Visual Basic).

## LessThanOrEqual(PlcDataBlockOperand, PlcDataBlockOperand)

Determines whether the first specified **PlcDataBlockOperand** object is less than or equal to the second **PlcDataBlockOperand** object.

## C#

```
public static bool operator <=(PlcDataBlockOperand left, PlcDataBlockOperand right)
```

## Exceptions

### ArgumentNullException

The **left** is a null reference (Nothing in Visual Basic).



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